



Main Office
720 Greencrest Drive
Westerville, Ohio 43081-4902
614.895.1400
Fax: 614.895.1171
www.gci2000.com

**REPORT OF PHASE II
ENVIRONMENTAL SITE ASSESSMENT**

**PROPERTY AT
154-164 S. YALE AVE.
COLUMBUS, FRANKLIN COUNTY, OHIO**

GCI PROJECT 11-E-16097A

Prepared By:
Geotechnical Consultants, Inc. (GCI)
720 Greenerst Drive
Westerville, Ohio 43081
Phone: 614-895-1400
www.gci2000.com

March 15, 2011

1.0 INTRODUCTION

██████████ retained Geotechnical Consultants, Inc. (GCI) to perform a Phase II environmental site assessment (Phase II ESA) of the property located at 154-164 S. Yale Ave, Columbus, Ohio (hereafter referred to as the "Property"). The Appendix of this report includes maps of the Property addressed in this report. This Phase II ESA addresses recognized environmental conditions (RECs) at the Property as determined in GCI's Phase I ESA report dated February 14, 2011.

Concentrations of chemicals of concern (COCs) in soil and groundwater samples collected at the Property for the Phase II ESA have been compared to Ohio Bureau of Underground Storage Tank Regulations (BUSTR) action levels for petroleum compounds, and to Ohio Environmental Protection Agency (Ohio EPA) Voluntary Action Program (VAP) generic soil and groundwater standards for compounds not regulated by BUSTR.

GCI personnel responsible for preparation of this report include Bruce Savage (Ohio VAP Certified Professional #265) and Michael Lacher, Project Geologist / Project Manager with GCI. GCI performed this Phase II ESA subsequent to completion of a Phase I ESA report concerning the subject Property. GCI developed the sampling and analysis plan for this Phase II ESA based on the conclusions drawn in the Phase I ESA report.

The purpose of this Phase II ESA was to evaluate the Property for the presence or absence of impacts to soil and groundwater media by the COCs. This Phase II ESA included an investigation of the environmental media to determine whether applicable standards are met in soil and groundwater below the areas investigated at the Property. Additionally, the Phase II ESA included a limited non-destructive geophysical survey to assess the absence or presence of underground storage tanks (USTs) as noted on historical Sanborn® maps included in the Phase I ESA.

2.0 PROPERTY DESCRIPTION

The Property is shown on the 1995 *Southwest Columbus, Ohio* USGS topographic map provided as the attached Figure 1. The Property is currently occupied by a closed former automotive repair building and pavement. The Property is located north of West Town Street and east of South Yale Avenue in Columbus, Ohio.

The attached Figure 2 shows the layout of the building and soil borings on the Property. The Property and its surrounding area consist of a mixture of commercial, office, and warehouse land uses, and residential properties to the west. Information regarding regional and Property-specific geology and hydrogeology is included within the Phase I ESA report.

4.0 GEOPHYSICAL SURVEY

GCI engaged Grumman Exploration, Inc. (Grumman) to perform a geophysical survey of the paved area south of the current building. Grumman's Figures 1 and 2 attached provide the boundaries of the GPR survey and EM scan areas on the Property.

Grumman conducted ground-penetrating radar (GPR) survey and reconnaissance level electromagnetic (EM) terrain conductivity scans at the Property on March 2, 2011. The EM scan in this area indicated anomalous strong EM in-phase responses, indicating multiple suspected UST system components (i.e. USTs, piping, dispenser locations), in the south and east portions of the property and outside the southwestern corner of the building. The GPR scan of that area was less

conclusive possibly due to various electrically conductive materials (e.g. wet clay, reinforced concrete etc.). . . .

5.0 SOIL AND GROUNDWATER SAMPLING PROCEDURES

GCI performed the subsurface investigation for the Phase II ESA on March 3, 2011. On this date GCI installed four (4) soil borings (EB-1, 2, 5, and 6) at the Property in the locations shown on the attached Figure 3. The borings extended to maximum depths between 12 feet and 16 feet below ground surface (bgs).

The borings were installed with a CME hollow stem auger rig. Following completion of the borings, we filled boreholes with bentonite and patched ground surfaces with compacted asphalt patching compound. The soil boring logs are attached to this report.

In general, below the asphalt pavement the borings encountered fill materials to depths between 2.5 feet and 4 feet bgs. In general, the fills contained varying amounts of brown clay or clay-silt, silt, sand, gravel, brick, cinders, and coal. A petroleum odor was noted in soils above 4 feet bgs in boring EB-1.

Underlying the surface fills, the borings encountered natural clay, silt, sand and gravel. Layers of gravel and cobbles were evident in the borings beginning at depths between approximately 8 feet and 10 feet bgs. The borings encountered groundwater at depths between approximately 8 feet and 12 feet in the gravel and sand zones.

GCI collected continuous soil samples in the unsaturated zone in the borings. Samples were collected in 4-foot long disposable liners advanced in steel split spoon sampling tubes. Decontamination procedures included washing the metal sampling tubes in Alconox® soap and water and rinsing with tap water followed by distilled water after each use. Samples were split into 2-foot long intervals and logged with respect to grain size, color, texture, moisture, and odor. Soil samples were selected for laboratory analysis based on readings from a MiniRAE 2000 photoionization detector (PID) and visual and/or olfactory characteristics.

GCI screened total volatile organics in soil samples collected from the borings using the PID. The PID readings are recorded on the boring logs attached to this report. PID readings on soils ranged from 0.0 parts per million (ppm) to a maximum detection of 445 ppm in boring EB-1 at the 2-4 feet bgs sampling interval. Overall the majority of the PID readings exceeded a minimum of 1 ppm. Based on the highest PID reading in each boring, GCI selected one soil sample each from each boring for laboratory chemical analysis.

GCI installed a new, dedicated, disposable temporary 1-inch diameter well screen in each soil boring reaching groundwater to attempt groundwater sampling. We collected groundwater samples using a Masterflex E/S portable peristaltic pump and new low density polyethylene tubing.

GCI collected and preserved soil and groundwater samples into laboratory glassware with appropriate seals, and placed the samples in an ice-filled cooler for transportation to the laboratory. Laboratory chain of custody documentation and reports are attached to this report. GCI shipped samples via overnight delivery to Environmental Science Corporation (ESC) in Mt. Juliet, Tennessee. ESC is Ohio VAP Certified Laboratory number CL0069.

GCI instructed ESC to analyze soil samples for the following COCs:

- a. Total petroleum hydrocarbons (TPH) gasoline range organics (GRO) using EPA method 8015,
- b. TPH – diesel range organics (DRO) using EPA method 8015M,
- c. Volatile organic compounds (VOC) using EPA method 8260B,
- d. Polycyclic aromatic hydrocarbons (PAH) using EPA method 8270C, and
- e. RCRA 8 metals using EPA methods 6010B and 7471 (mercury).

Groundwater samples were analyzed for the following COCs:

- a. VOCs using EPA method 8260B, and
- b. PAH using EPA method 8270C-SIM.

6.0 SOIL AND GROUNDWATER RESULTS

After receiving final laboratory data for soil and groundwater, GCI compared the results for BUSTR-regulated petroleum COCs with the current Ohio BUSTR action levels for UST closure and soil re-use. The BUSTR action levels are sourced from Ohio Administrative Code (OAC) 1301:7-9-13 and -16.

GCI compared non-BUSTR regulated COC results with the Ohio VAP generic direct contact soil standards (GDCSS) for commercial and industrial land uses, and generic unrestricted potable use standards (GUPUS) for groundwater. The VAP GDCSS and GUPUS values are sourced from OAC 3745-300-08.

Soil and groundwater analytical data are summarized in the attached Tables 1 and 2. The laboratory chemical analysis reports are also attached to this report.

6.1 Soil Results

Analysis indicated the presence of various concentrations of petroleum COCs in soil samples EB-1, 2, and 6. No TPH, VOC or PAH were detected in soil sample EB-5. The concentrations of TPH (C10-C20) in sample EB-1 and PAH (benzo(a)pyrene and benzo(b)fluoranthene) in sample EB-6 exceeded the BUSTR soil closure action levels. Metals concentrations in the soil were below VAP GDCSS.

6.2 Groundwater Results

Analysis of groundwater revealed elevated concentrations of VOC in all groundwater samples, and elevated PAH in EB-1 and EB-6. The concentrations of benzo(a)anthracene in groundwater samples EB-1 and EB-6 exceeded the BUSTR groundwater as drinking water action levels.

7.0 PHASE II ESA FINDINGS AND CONCLUSIONS

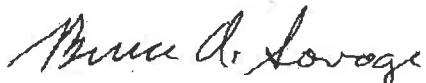
The Phase II ESA included a geophysical survey to locate suspected UST areas, and four (4) soil borings to sample and analyze subsurface soils and groundwater relative to the UST areas. The geophysical survey indicated the presence of multiple suspected UST system component areas: suspected USTs in the eastern portion of the property and southwest of the building, and suspected former pump island areas south of the building and in the south portion of the property (between the two former entrance drive locations off of West Town Street). The attached Figures 1 and 2 from the geophysical survey display the geophysical survey findings.

Following the geophysical survey, GCI installed soil borings EB-1, EB-2, EB-5, and EB-6 adjacent to the suspected UST system areas. The attached Figure 3 indicates the soil boring locations. Soil and groundwater samples collected from the borings indicate soil and groundwater are impacted by petroleum and hazardous substances. Specifically, concentrations of total petroleum hydrocarbons (TPH) and polycyclic aromatic hydrocarbons (PAH) in soil, and PAH in groundwater exceed current Ohio action levels. The attached Tables 1 and 2 summarize the laboratory analytical findings.

Based on the findings of the Phase II ESA, GCI recommends excavating test pits in the suspected UST system areas, and properly closing (i.e. removing) UST systems if present. The laboratory chemical analysis results from the Phase II ESA indicate soil and groundwater remediation would be necessary to meet Ohio action levels for the COCs. Additional investigation of soil and groundwater would be needed to determine the extent of soil and groundwater impacts exceeding the action levels.

Thank you very much for the opportunity to serve you on this project. Please contact our office if you have any questions or concerns regarding the information contained in this transmittal.

Respectfully submitted,
Geotechnical Consultants, Inc. (GCI)



Bruce A. Savage, CPG
VAP Certified Professional No. CP265
Principal, Director Environmental Services

Attachments: Figure 1 – 1995 Southwest Columbus, Ohio USGS Topographic Map

- Figure 2 - Boring Location Map
- Geophysical Survey Figures 1 and 2
- Table 1 - Soil Analytical Results
- Table 2 - Groundwater Analytical Results
- Soil Boring Logs
- ESC Laboratory Report with sample chain of custody
- Certified Laboratory Affidavit

LIMITATIONS AND QUALIFICATIONS

This report is an instrument of professional service prepared by GCI for the sole use of [REDACTED] and other parties that may be designated jointly by [REDACTED] and GCI. Any other party that wishes to use or rely upon this report, or that wishes to duplicate, otherwise reproduce or copy, or excerpt from, or quote this report must apply for authorization to do so. Any unauthorized use of or reliance on this report shall release GCI from any liability resulting from such use or reliance. Any unauthorized duplication, other reproduction or copying, or exception or quotation of this report shall expose the violator to all legal remedies available to GCI.

GCI performed this Phase II ESA in accordance with the generally accepted practices of environmental professionals performing similar services in the same locale under similar circumstances at the time of this assessment. No statement of opinion contained in this report shall be construed to create any warranty or representation that the real Property, on which the assessment was performed, is free of pollution or complies with any or all applicable regulatory or statutory requirements; or that the Property is fit for any particular purpose. No attempt was made to evaluate the compliance of present or past owners of the Property with federal, state or local laws and regulations.

The conclusions presented in this report were based upon the services described, and not on scientific tasks or procedures beyond the scope of described services or time and budgetary constraints. Any person or entity concerning the Property shall be solely responsible for determining the adequacy of the Property for any and all uses for which that person or entity shall use the Property. Any person or entity considering the use, acquisition or other involvement or activity concerning the Property which is the subject of this report should enter into any use, occupation, acquisition or the like on sole reliance of their own judgment and on their own personal assessment of such Property and not in reliance upon any representation by GCI regarding such Property, the character, quality or value thereof. GCI shall not be responsible for conditions or consequences arising from relevant facts that were concealed, withheld or not fully disclosed at the time we performed the assessment.

FIGURE 1 - 1995 USGS TOPOGRAPHIC MAP

GCI PROJECT #11-E-16097A

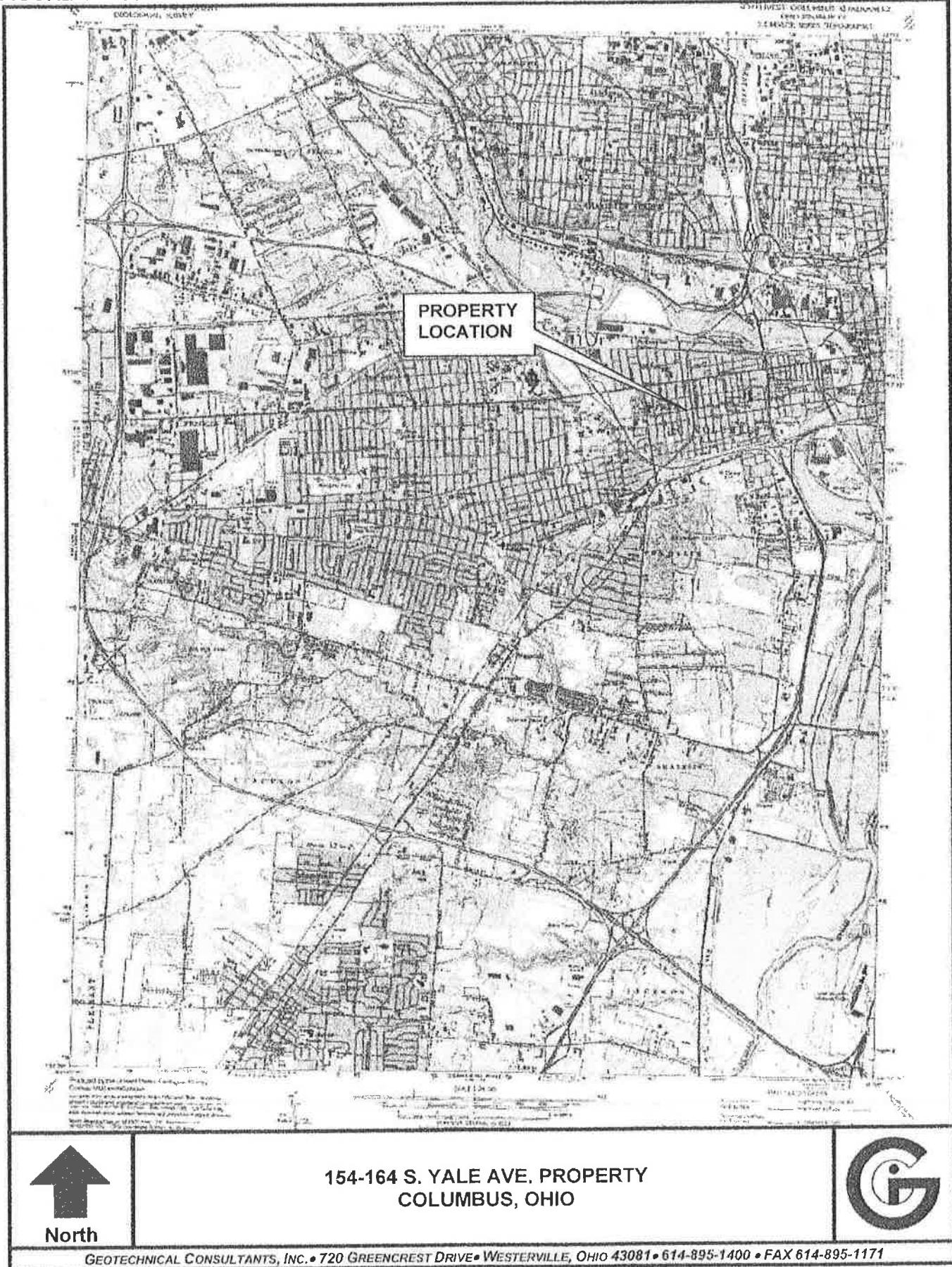
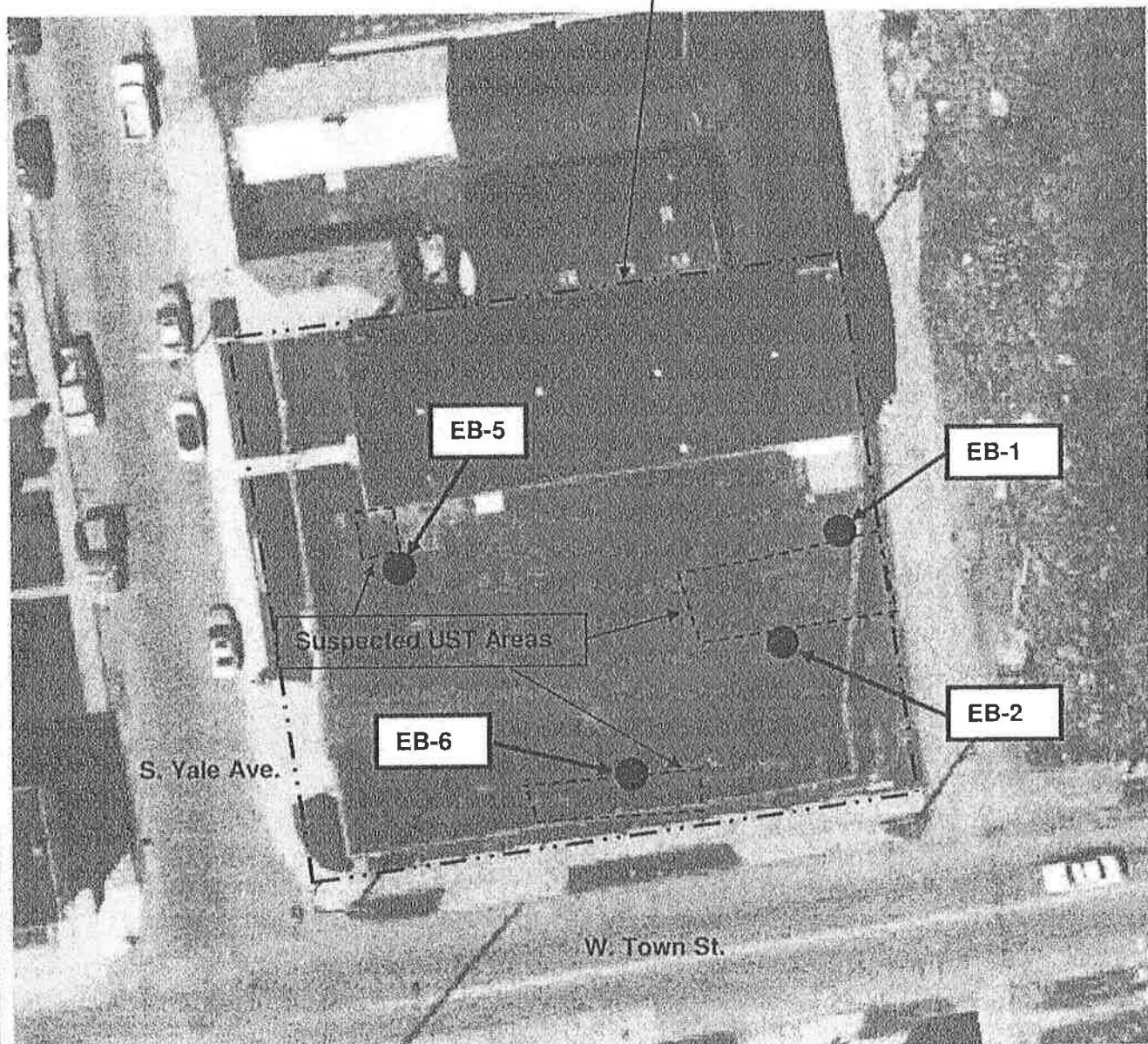


Figure 2 – Boring Location Map

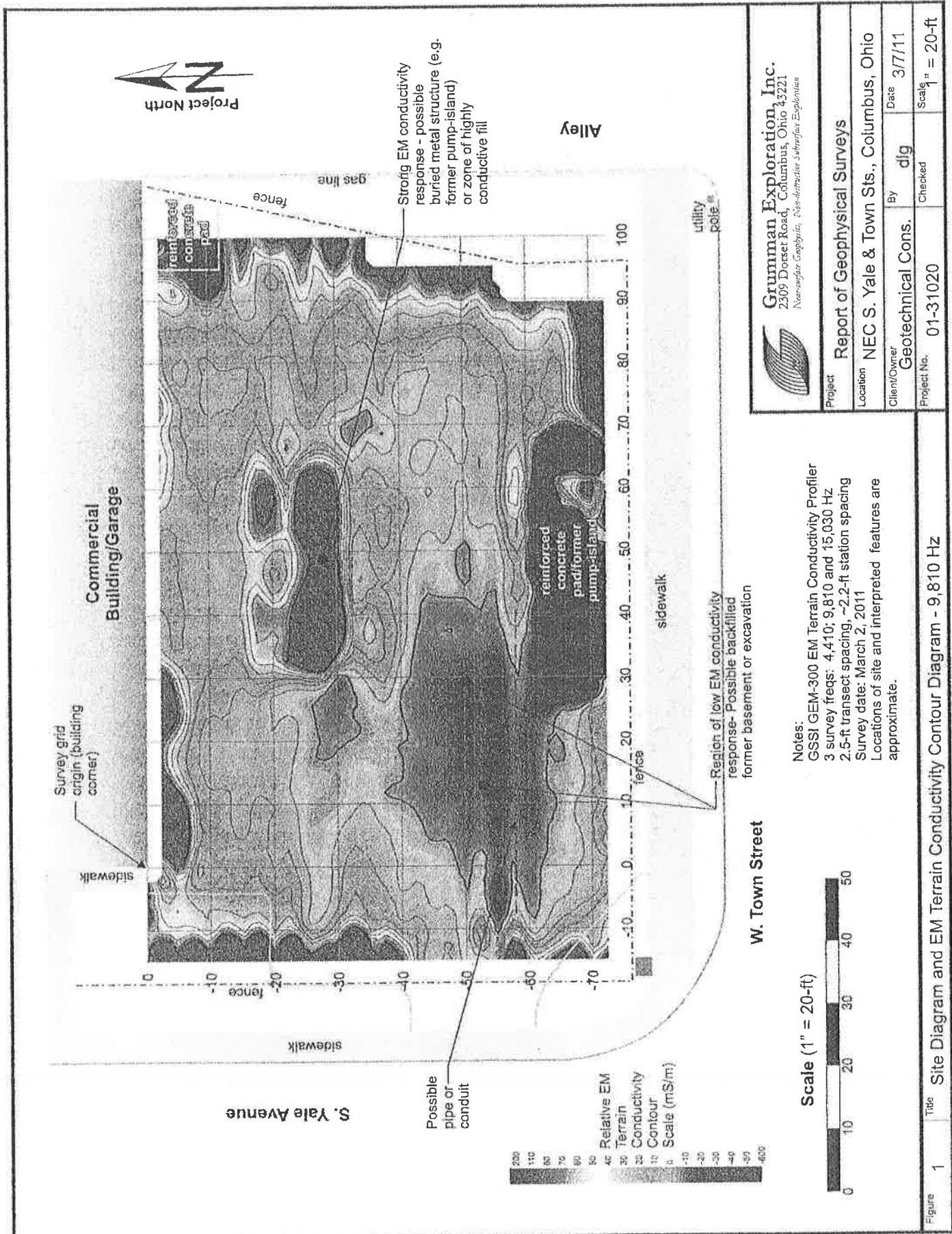
GCI PROJECT #11-E-16097A



154-164 S. Yale Ave.
Columbus, Franklin County, Ohio



GEOTECHNICAL CONSULTANTS, INC. • 720 GREENCREST DRIVE • WESTERVILLE, OHIO 43081 • 614-895-1400 • FAX 614-895-1171



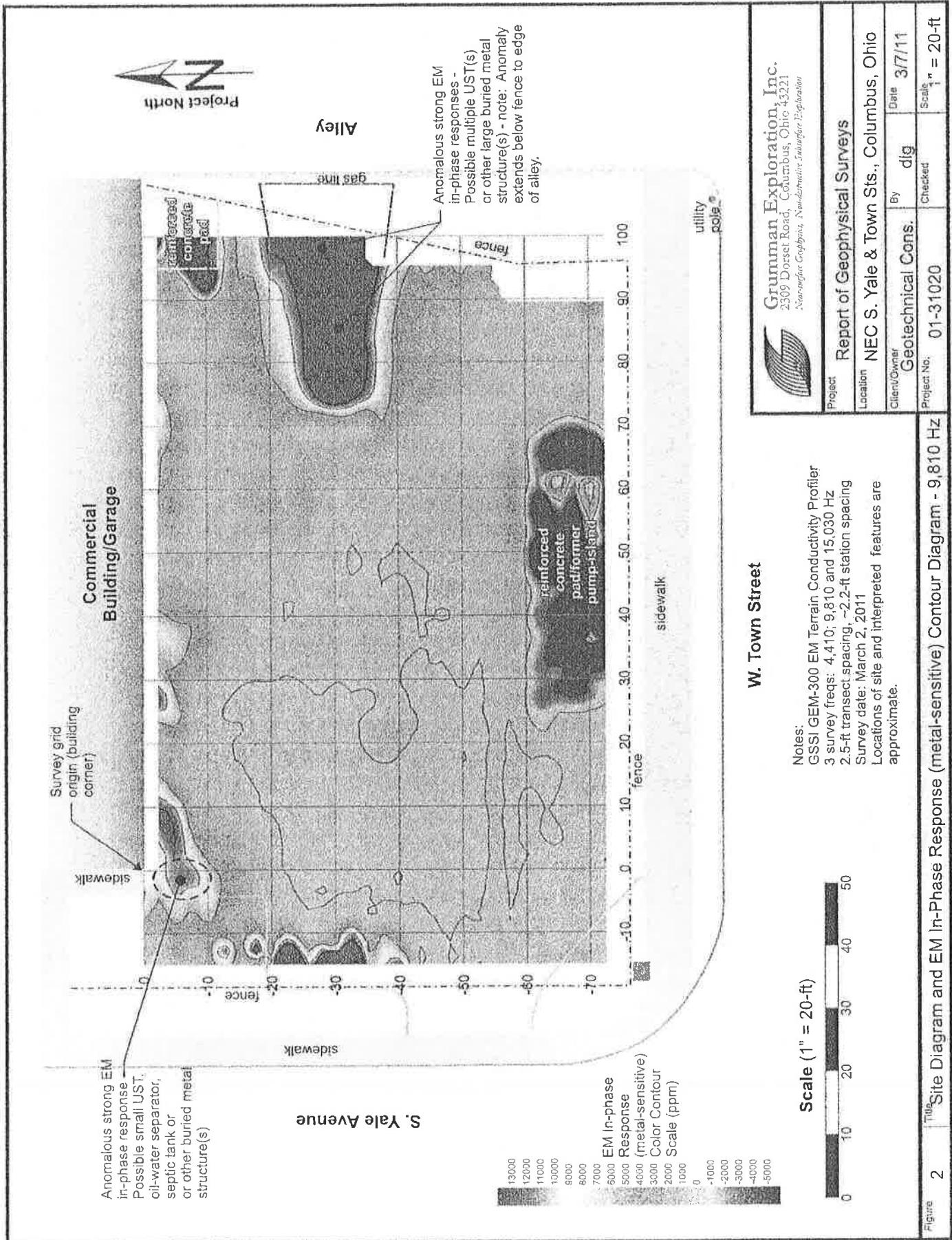


Table 1
Soil Sample Analysis Results
Selection Criteria
Account: GOICOLOH
Client Sample IDs: EB-1,0-4 FT, EB-2,6-8 FT, EB-5,6-8 FT; EB-6,0-2 FT
Lab Sample ID: L504877-
Collect Date: 3/3/2011
Methods: L504877-01, L504877-02, L504877-03, L504877-04, L504877-05, L504877-06, L504877-07, L504877-08, L504877-09, L504877-10, L504877-11, L504877-12

Results		Parameter	Units	BUSTR PCS Re-Use	BUSTR Closure Soil Class 1	VAP	Commercial GDSS	Value	Value	Value	Value
Method	Lab Sample ID	Total Solids	%	-	-	-	-	87.6	83	77.5	77.2
METALS											
74711 Mercury	mgi/kg	-	-	290	0.039	0.04	0.028	0.24			
6010B Arsenic	mgi/kg	-	-	82	1	9.5	1.2	9.8			
6010B Barium	mgi/kg	-	-	370,000	280	170	180	240			
6010B Cadmium	mgi/kg	-	-	2,300	4-4	1.2	1.8	1.7			
6010B Chromium	mgi/kg	-	-	1,000,000	15	16	23	19			
6010B Lead	mgi/kg	-	-	1,800	180	26	18	13			
TOTAL PETROLEUM HYDROCARBONS (TPH)											
8015TPH C8-C12	mgi/kg	1,000,00	1,000,00	-	590	1	<0.64	<0.65			
8015M C10-C20 Hydrocarbons	mgi/kg	2,000,00	2,000,00	-	3100	<4.8	<5.1	<5.2			
8015M C20-C34 Hydrocarbons	mgi/kg	5,000,00	5,000,00	-	3900	<10	<11	<14			
VOLATILE ORGANIC COMPOUNDS (VOC)											
6260B Benzene	mgi/kg	0.015	0.149	N/A	<0.11	<0.0060	<0.0064	<0.0065			
8260B 1-n-Butylbenzene	mgi/kg	-	-	178	0.25	0.012	<0.0064	<0.0065			
8260B 1-sec-Butylbenzene	mgi/kg	-	-	764	0.41	0.016	<0.0064	<0.0065			
8260B Ethylbenzene	mgi/kg	4.55	45.5	N/A	0.08	0.0087	<0.0064	<0.0065			
8260B Isopropylbenzene	mgi/kg	-	-	260	0.37	0.007	<0.0064	<0.0065			
8260B 1-Eicosylbenzene	mgi/kg	-	-	573	<0.11	0.0058	<0.0064	<0.0065			
8260B Methyl tert-butyl ether	mgi/kg	0.047	0.47	N/A	<0.11	<0.0060	<0.0064	<0.0065			
8260B Naphthalene	mgi/kg	3.98	39.8	N/A	0.95	0.030	<0.0064	<0.0065			
8260B n-Propylbenzene	mgi/kg	--	--	236	0.29	0.011	<0.0064	<0.0065			
8260B Toluene	mgi/kg	4.91	49.1	N/A	<0.57	<0.030	<0.032	<0.032			
8260B 1,2,4-Trimethylbenzene	mgi/kg	--	--	120	0.39	0.0387	<0.0064	<0.0065			
8260B 1,3,5-Triethylbenzene	mgi/kg	--	--	95	0.14	0.01	<0.0064	<0.0065			
8260S Xylenes, Total	mgi/kg	15.7	N/A	0.52	0.24	<0.019	<0.019	<0.019			
POLYCYCLIC AROMATIC HYDROCARBONS (PAH)											
8270C Anthracene	mgi/kg	-	-	280,000	<7.9	<0.040	<0.042	4			
8270C Acenaphthene	mgi/kg	-	-	56,000	<1.0	<0.040	<0.042	3.3			
8270C Benzo(a)anthracene	mgi/kg	2.2	11	N/A	<1.9	0.12	<0.042	11			
8270C Benzo(a)pyrene	mgi/kg	1.1	1.1	N/A	<1.9	0.12	<0.042	8			
8270C Benzo(b)fluoranthene	mgi/kg	5.53	15	N/A	<1.9	0.12	<0.042	13			
8270C Benzo(g,h,i)perylene	mgi/kg	-	-	28,000	<1.9	0.043	<0.042	21			
8270C Benzo(k)fluoranthene	mgi/kg	1.97	110	N/A	<1.9	0.05	<0.042	3.5			
8270C Chrysene	mgi/kg	1.27	1100	N/A	<1.9	0.089	<0.042	7.9			
8270C Dibenz(a,h)anthracene	mgi/kg	0.94	1.1	N/A	<1.9	<0.040	<0.042	<0.05			
8270C Fluoranthene	mgi/kg	-	-	37,000	2.7	0.2	<0.042	21			
8270C Fluorene	mgi/kg	-	-	37,000	<1.9	<0.040	<0.042	12			
8270C Indeno(1,2,3-cd)pyrene	mgi/kg	0.15	11	N/A	<1.9	0.043	<0.042	2.3			
8270C Phenanthrene	mgi/kg	--	--	28,000	<1.9	0.059	<0.042	18			
8270C Pyrene	mgi/kg	--	--	28,000	2.4	0.17	<0.042	15			

Notes

Report generated on 13-Mar-2011 at: 2:24 PM
BUSTR PCS Re-Use means these are the BUSTR Petroleum Contaminated Soil Re-Use Action Levels from OAC 1301:7-9-16.

BUSTR Closure Soil Class 1 means these are the BUSTR Closure Action Levels for Soil Class 1 from OAC 1301:7-9-13.

VAP Commercial GDSS means these are the Ohio EPA Voluntary Action Program Generic Direct Contact Soil Standards for Commercial land uses.

Table 2
Groundwater Sample Analysis Results
154-164 S. Yale Ave., Columbus, Ohio Property

Selection Criteria

Account: GCICOLOH
 Client Project ID: 11-E-16097A
 Client Sample IDs: EB-1 ; EB-2 ; EB-5 ; EB-6
 Methods: 8260B ; 8270C-SIM

Results

Lab Sample ID			OHIO DRINKING WATER STANDARDS	L504877-05	L504877-06	L504877-07	L504877-08	
Client Sample ID				EB-1	EB-2	EB-5	EB-6	
Collect Date				3/3/2011	3/3/2011	3/3/2011	3/3/2011	
Method	Parameter	Units		Value	Value	Value	Value	
VOLATILE ORGANIC COMPOUNDS (VOC)								
8260B	Acetone	µg/l	14,000	210	<50	<50	<50	
8260B	Benzene	µg/l	5	2.4	1.3	<1.0	1.1	
8260B	n-Butylbenzene	µg/l	1,300	15	<1.0	<1.0	30	
8260B	sec-Butylbenzene	µg/l	1,300	20	<1.0	<1.0	<1.0	
8260B	tert-Butylbenzene	µg/l	1,300	<1.0	<1.0	<1.0	2.8	
8260B	cis-1,2-Dichloroethene	µg/l	70	<1.0	<1.0	<1.0	<1.0	
8260B	Isopropylbenzene	µg/l	1,400	23	<1.0	<1.0	11	
8260B	Methyl tert-butyl ether	µg/l	40	<1.0	<1.0	<1.0	<1.0	
8260B	n-Propylbenzene	µg/l	1,400	28	<1.0	<1.0	16	
8260B	Toluene	µg/l	1,000	5.1	<5.0	<5.0	<5.0	
8260B	Trichloroethene	µg/l	5	<1.0	3.1	1.2	<1.0	
8260B	1,2,4-Trimethylbenzene	µg/l	140	1.9	<1.0	<1.0	<1.0	
8260B	Xylenes, Total	µg/l	10,000	3.5	<3.0	<3.0	<3.0	
POLYCYCLIC AROMATIC HYDROCARBONS (PAH)								
8270C-SIM	Acenaphthene	µg/l	950	0.84	<0.40	<1.6	<1.6	
8270C-SIM	Acenaphthylene	µg/l	950	1.2	<0.40	<1.6	4.2	
8270C-SIM	Benzo(a)anthracene	µg/l	0.26	1.2	<0.40	<1.6	2.7	
8270C-SIM	Benzo(a)pyrene	µg/l	0.2	<0.45	<0.40	<1.6	<1.6	
8270C-SIM	Benzo(b)fluoranthene	µg/l	0.17	<0.45	<0.40	<1.6	<1.6	
8270C-SIM	Chrysene	µg/l	47	1.2	<0.40	<1.6	2.9	
8270C-SIM	Dibenz(a,h)anthracene	µg/l	0.2	<0.45	<0.40	<1.6	<1.6	
8270C-SIM	Fluoranthene	µg/l	420	1.2	<0.40	<1.6	3.2	
8270C-SIM	Fluorene	µg/l	630	0.89	<0.40	<1.6	3.6	
8270C-SIM	Indeno(1,2,3-cd)pyrene	µg/l	0.22	<0.45	<0.40	<1.6	<1.6	
8270C-SIM	Naphthalene	µg/l	140	<9.1	<2.0	<8.0	20	
8270C-SIM	Phenanthrene	µg/l	4,700	1.8	<0.40	<1.6	3.9	
8270C-SIM	Pyrene	µg/l	470	1.2	<0.40	<1.6	3.2	
8270C-SIM	1-Methylnaphthalene	µg/l	1,100	60	<2.0	<8.0	160	
8270C-SIM	2-Methylnaphthalene	µg/l	63	<9.1	<2.0	<8.0	18	

Notes

Report generated on: 14-Mar-11 at: 10:56 AM

Ohio Drinking Water Action Levels sourced from OAC 1301:7-9-13 and/or OAC 3745-300-08

TEST BORING LOG

PROJECT NAME 154-164 S. Yale Ave - Columbus, OH

BORING NO. EB-1

PROJ.

SURF. ELEV.

NO. 11-E-16097 A DATE DRILLED 3/3/2011

CLIENT W.W. WOODWARD INC.

GROUND WATER OBSERVATION		Proportions Used		140 lb Wt. x 30" fall on 2" O.D. Sampler		Cohesionless Density		Cohesive Consistency	
9.1	FEET BELOW SURFACE AT COMPLETION	trace	0 to 10%	0 - 10	Loose	0 - 4			Soft
	FEET BELOW SURFACE AT 24 HOURS	little	10 to 20%	10 - 30	Medium Dense	4 - 8			Medium Stiff
	FEET BELOW SURFACE AT _____ HOURS	some	20 to 35%	30 - 50	Dense	8 - 15			Stiff
		and	35 to 50%	50 +	Very Dense	15 - 30			Very Stiff Hard

LOCATION OF BORING

See Boring Location Plan

DEPTH	PID Readings (ppm)	Sample Depths From To	Type of Sample	Moisture Density or Consist.	Strata* Change Depth	SOIL IDENTIFICATION			
						Remarks include color, type of soil, etc. Rock-color, type, condition, hardness			
5	253	0.0-2.0	SS	Moist	0.1	Asphalt			
						FILL: Brown to Black Stained Clay, some silt, some sand, little gravel, trace coal and cinders			
	445	2.0-4.0	SS		4.0	Petroleum odor 0' to 4'			
	11.2	4.0-6.0	SS			Brown Stained Clay, little silt, little sand, trace gravel			
	2.2	6.0-8.0	SS		8.0				
	32.7	8.0-10.0	SS			Cobbles and gravel, some sand			
	68.7	10.0-12.0	SS		12.0				
	-	12.0-14.0	SS			Brown Coarse Sand and Gravel Water Seepage at 12.0'			
					14.0				
						BOTTOM OF BORING: 14.0'			

* The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



TEST BORING LOG

PROJECT NAME 154-164 S. Yale Ave - Columbus, OH BORING NO. EB-2
 PROJ. SURF. ELEV.
 CLIENT XXXXXXXXXXXXXX NO. 11-E-16097 A DATE DRILLED 3/3/2011

GROUND WATER OBSERVATION			Proportions Used		140 lb Wt. x 30" fall on 2" O.D. Sampler			
					Cohesionless Density	Cohesive Consistency		
8.0	FEET BELOW SURFACE AT COMPLETION		trace	0 to 10%	0 - 10	Loose	0 - 4	Soft
	FEET BELOW SURFACE AT 24 HOURS		little	10 to 20%	10 - 30	Medium Dense	4 - 8	Medium Stiff
	FEET BELOW SURFACE AT _____ HOURS		some and	20 to 35%	30 - 50	Dense	8 - 15	Stiff
				35 to 50%	50 +	Very Dense	15 - 30	Very Stiff
							30 +	Hard

LOCATION OF BORING

See Boring Location Plan

DEPTH	PID Readings (ppm)	Sample Depths From To	Type of Sample	Moisture Density or Consist.	Strata* Change Depth	SOIL IDENTIFICATION		
						Remarks include color, type of soil, etc. Rock-color, type, condition, hardness		
	2.2	0.0-2.0	SS		0.6	Asphalt (1") and Stone (6")		
						FILL: Brown Clay-Silt, some sand, little gravel		
	3.1	2.0-4.0	SS		3.5			
	1.4	4.0-6.0	SS			Brown and Black Stained Clay, some silt, some sand, little gravel		
5								
	6.7	6.0-8.0	SS					
	-	8.0-10.0	SS	Wet		Water Seepage at 8.0'		
	--	10.0-12.0	SS		10.0	Cobbles and gravel, little sand (No Recovery 10'-12')		
10					12.0			
	--	12.0-14.0	SS	Wet		Gray Coarse Sand and Gravel		
					14.0			
15						BOTTOM OF BORING: 14.0'		

* The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



TEST BORING LOG

PROJECT NAME 154-164 S. Yale Ave - Columbus, OH

BORING NO. EB-5

CLIENT W.W. WOODWARD & CO., INC.

PROJ.

SURF. ELEV.

NO. 11-E-16097 A DATE DRILLED 3/3/2011

GROUND WATER OBSERVATION			Proportions Used	140 lb Wt. x 30" fall on 2" O.D. Sampler	Cohesionless Density	Cohesive Consistency
<u>12.0</u>	FEET BELOW SURFACE AT COMPLETION		trace	0 to 10%	0 - 10	Loose
			little	10 to 20%	10 - 30	Medium Dense
			some	20 to 35%	30 - 50	Dense
			and	35 to 50%	50 +	Very Dense

LOCATION OF BORING

See Boring Location Plan

DEPTH	PID Readings (ppm)	Sample Depths From To	Type of Sample	Moisture Density or Consist.	Strata* Change Depth	SOIL IDENTIFICATION	
						Remarks include color, type of soil, etc. Rock-color, type, condition, hardness	
5	0.9	0.0-2.0	SS	Moist	0.1	Asphalt	
						Brown Stained Clay, some silt, little sand	
	1.2	2.0-4.0	SS		3.5		
						Brown Clay-Silt, some sand, little gravel	
	7.1	4.0-6.0	SS				
	4.4	6.0-8.0	SS	Moist			
	8.9	8.0-10.0	SS				
	--	10.0-12.0	SS		10.0	No Recovery (apparent gravel)	
					12.0	Water Seepage at 12.0'	
		12.0-14.0	SS			Brown Coarse Sand and Gravel	
15		14.0-16.0	SS	Wet			
					16.0		
BOTTOM OF BORING: 16.0'							

* The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



TEST BORING LOG

PROJECT NAME 154-164 S. Yale Ave - Columbus, OH

BORING NO. EB-6

CLIENT WACKER SOILS INC.

PROJ.

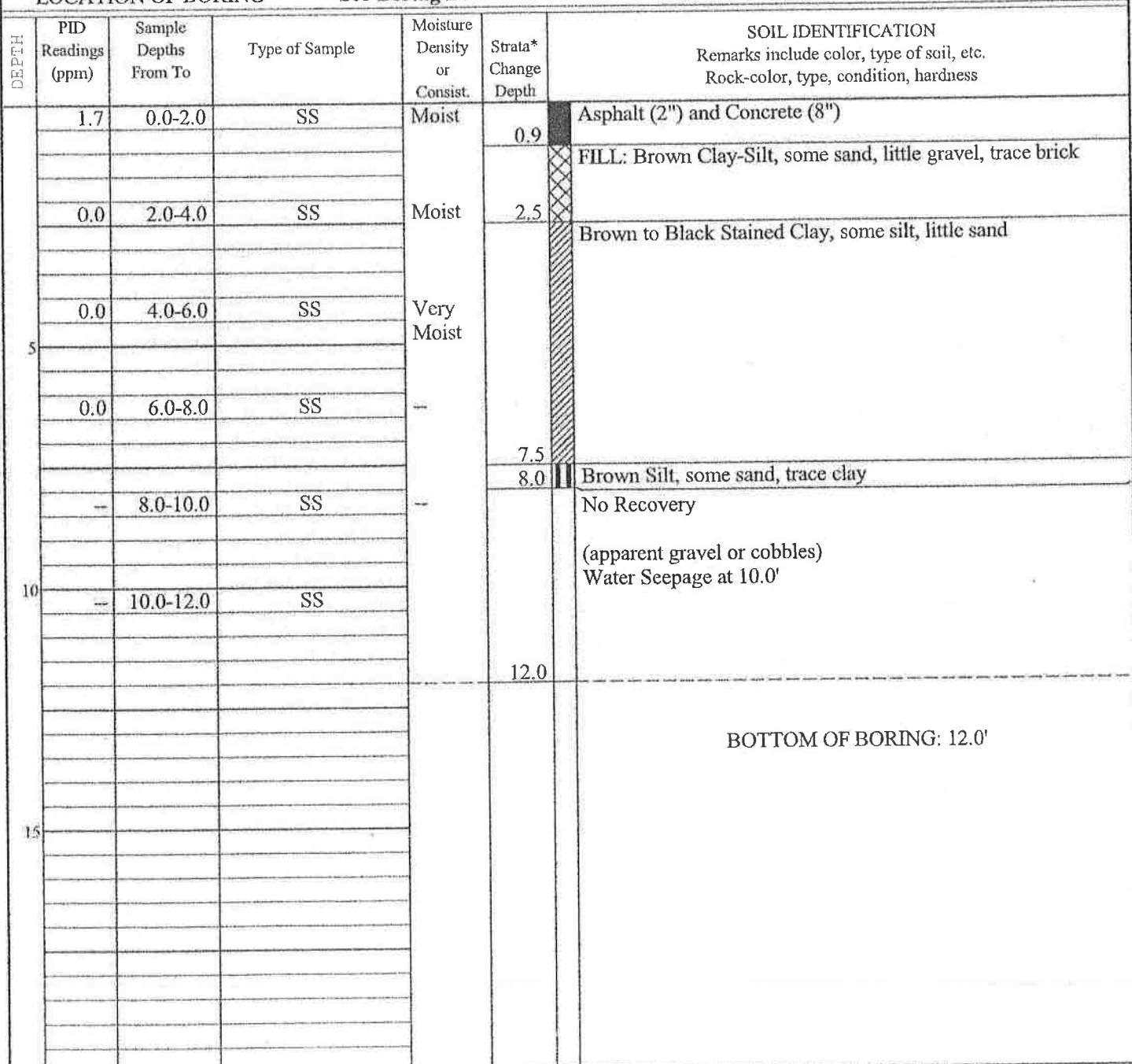
SURF. ELEV.

NO. 11-E-16097 A DATE DRILLED 3/3/2011

GROUND WATER OBSERVATION			Proportions Used		140 lb Wt. x 30" fall on 2" O.D. Sampler		Cohesionless Density		Cohesive Consistency	
<u>10.0</u>	FEET BELOW SURFACE AT COMPLETION		trace	0 to 10%	0 - 10	Loose	0 - 4		Soft	
	FEET BELOW SURFACE AT 24 HOURS		little	10 to 20%	10 - 30	Medium Dense	4 - 8	Medium	Stiff	
	FEET BELOW SURFACE AT _____ HOURS		some	20 to 35%	30 - 50	Dense	8 - 15	Stiff		
			and	35 to 50%	50 +	Very Dense	15 - 30	Very Stiff		
							30 +	Hard		

LOCATION OF BORING

See Boring Location Plan



* The stratification lines represent the approximate boundary between soil types and the transition may be gradual.





YOUR LAB OF CHOICE

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5856
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Mike Lacher
Geotechnical Consultants, Inc.
720 Greencrest Drive
Westerville, OH 43001

Report Summary

Friday March 11, 2011

Report Number: L504877

Samples Received: 03/05/11

Client Project: 11-E-16097A

Description: S. Yale Ave.

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

T. Alan Harvill, ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A,
TX - T104704245, OK-9915

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA EIAP.

This report may not be reproduced, except in full, without written approval from ESC Lab Sciences. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



YOUR LAB OF CHOICE

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5959
Fax: (615) 758-5859

Tax I.D. # 62-0014289

Est. 1970

REPORT OF ANALYSIS

March 11, 2011

Mike Lacher
Geotechnical Consultants, Inc.
720 Greencrest Drive
Westerville, OH 43081

ESC Sample #: L504877-01

Date Received : March 05, 2011
Description : S. Yale Ave.

Site ID :

Sample ID : EB-1 0-4 FT

Project #: 11-E-16097A

Collected By : Mike Lacher
Collection Date : 03/03/11 13:20

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	88.		%	2540G	03/11/11	1
Mercury	0.039	0.023	mg/kg	7471	03/08/11	1
Arsenic	11.	5.7	mg/kg	6010B	03/10/11	5
Barium	280	0.28	mg/kg	6010B	03/10/11	1
Cadmium	1.4	0.28	mg/kg	6010B	03/10/11	1
Chromium	15.	0.57	mg/kg	6010B	03/10/11	1
Lead	160	0.28	mg/kg	6010B	03/10/11	1
Selenium	BDL	1.1	mg/kg	6010B	03/10/11	1
Silver	BDL	0.57	mg/kg	6010B	03/10/11	1
TPH C6 - C12	590	11.	mg/kg	8015	03/07/11	100
Surrogate Recovery-%			% Rec.			
a,a,a-Trifluorotoluene (FID)	108.			8015	03/07/11	100
Volatile Organics						
Acetone	BDL	5.7	mg/kg	8260B	03/07/11	100
Acrylonitrile	BDL	1.1	mg/kg	8260B	03/07/11	100
Benzene	BDL	0.11	mg/kg	8260B	03/07/11	100
Bromobenzene	BDL	0.11	mg/kg	8260B	03/07/11	100
Bromodichloromethane	BDL	0.11	mg/kg	8260B	03/07/11	100
Bromoform	BDL	0.11	mg/kg	8260B	03/07/11	100
Bromomethane	BDL	0.57	mg/kg	8260B	03/07/11	100
n-Butylbenzene	0.25	0.11	mg/kg	8260B	03/07/11	100
sec-Butylbenzene	0.41	0.11	mg/kg	8260B	03/07/11	100
tert-Butylbenzene	BDL	0.11	mg/kg	8260B	03/07/11	100
Carbon tetrachloride	BDL	0.11	mg/kg	8260B	03/07/11	100
Chlorobenzene	BDL	0.11	mg/kg	8260B	03/07/11	100
Chlorodibromomethane	BDL	0.11	mg/kg	8260B	03/07/11	100
Chloroethane	BDL	0.57	mg/kg	8260B	03/07/11	100
2-Chloroethyl vinyl ether	BDL	5.7	mg/kg	8260B	03/07/11	100
Chloroform	BDL	0.57	mg/kg	8260B	03/07/11	100
Chloromethane	BDL	0.28	mg/kg	8260B	03/07/11	100
2-Chlorotoluene	BDL	0.11	mg/kg	8260B	03/07/11	100
4-Chlorotoluene	BDL	0.11	mg/kg	8260B	03/07/11	100
1,2-Dibromo-3-Chloropropane	BDL	0.57	mg/kg	8260B	03/07/11	100
1,2-Dibromoethane	BDL	0.11	mg/kg	8260B	03/07/11	100
Dibromomethane	BDL	0.11	mg/kg	8260B	03/07/11	100
1,2-Dichlorobenzene	BDL	0.11	mg/kg	8260B	03/07/11	100
1,3-Dichlorobenzene	BDL	0.11	mg/kg	8260B	03/07/11	100
1,4-Dichlorobenzene	BDL	0.11	mg/kg	8260B	03/07/11	100
Dichlorodifluoromethane	BDL	0.57	mg/kg	8260B	03/07/11	100
1,1-Dichloroethane	BDL	0.11	mg/kg	8260B	03/07/11	100

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

This report shall not be reproduced, except in full, without the written approval from ESC.

The reported analytical results relate only to the sample submitted

L504877-01 (V8260HEX) - Non-target compounds too high to run at a lower dilution.



LAB SCIENCES

YOUR LAB OF CHOICE

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 750-5858
1-800-767-5859
Fax (615) 750-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

March 11, 2011

Mike Lacher
Geotechnical Consultants, Inc.
720 Greencrest Drive
Westerville, OH 43081

ESC Sample # : L504877-01

Date Received : March 05, 2011
Description : S. Yale Ave.

Site ID :

Sample ID : EB-1 0-4 FT

Project # : 11-E-16097A

Collected By : Mike Lacher
Collection Date : 03/03/11 13:20

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.	
1,2-Dichloroethane	BDL	0.11	mg/kg	8260B	03/07/11	100	
1,1-Dichloroethene	BDL	0.11	mg/kg	8260B	03/07/11	100	
cis-1,2-Dichloroethene	BDL	0.11	mg/kg	8260B	03/07/11	100	
trans-1,2-Dichloroethene	BDL	0.11	mg/kg	8260B	03/07/11	100	
1,2-Dichloropropane	BDL	0.11	mg/kg	8260B	03/07/11	100	
1,1-Dichloropropene	BDL	0.11	mg/kg	8260B	03/07/11	100	
1,3-Dichloropropene	BDL	0.11	mg/kg	8260B	03/07/11	100	
cis-1,3-Dichloropropene	BDL	0.11	mg/kg	8260B	03/07/11	100	
trans-1,3-Dichloropropene	BDL	0.11	mg/kg	8260B	03/07/11	100	
2,2-Dichloropropane	BDL	0.11	mg/kg	8260B	03/07/11	100	
Di-isopropyl ether	0.18	0.11	mg/kg	8260B	03/07/11	100	
Ethylbenzene	BDL	0.11	mg/kg	8260B	03/07/11	100	
Hexachloro-1,3-butadiene	BDL	1.1	mg/kg	8260B	03/07/11	100	
n-Hexane	0.37	0.11	mg/kg	8260B	03/07/11	100	
Isopropylbenzene	BDL	0.11	mg/kg	8260B	03/07/11	100	
p-Isopropyltoluene	BDL	1.1	mg/kg	8260B	03/07/11	100	
2-Butanone (MEK)	BDL	0.57	mg/kg	8260B	03/07/11	100	
Methylene Chloride	BDL	1.1	mg/kg	8260B	03/07/11	100	
4-Methyl-2-pentanone (MIBK)	BDL	0.11	mg/kg	8260B	03/07/11	100	
Methyl tert-butyl ether	BDL	0.95	0.57	mg/kg	8260B	03/07/11	100
Naphthalene	0.32	0.11	mg/kg	8260B	03/07/11	100	
n-Propylbenzene	BDL	0.11	mg/kg	8260B	03/07/11	100	
Styrene	BDL	0.11	mg/kg	8260B	03/07/11	100	
1,1,1,2-Tetrachloroethane	BDL	0.11	mg/kg	8260B	03/07/11	100	
1,1,2,2-Tetrachloroethane	BDL	0.11	mg/kg	8260B	03/07/11	100	
Tetrachloroethene	BDL	0.11	mg/kg	8260B	03/07/11	100	
Toluene	BDL	0.57	mg/kg	8260B	03/07/11	100	
1,2,3-Trichlorobenzene	BDL	0.11	mg/kg	8260B	03/07/11	100	
1,2,4-Trichlorobenzene	BDL	0.11	mg/kg	8260B	03/07/11	100	
1,1,1-Trichloroethane	BDL	0.11	mg/kg	8260B	03/07/11	100	
1,1,2-Trichloroethane	BDL	0.11	mg/kg	8260B	03/07/11	100	
Trichloroethene	BDL	0.11	mg/kg	8260B	03/07/11	100	
Trichlorofluoromethane	BDL	0.57	mg/kg	8260B	03/07/11	100	
1,2,3-Trichloropropene	BDL	0.28	mg/kg	8260B	03/07/11	100	
1,2,4-Trimethylbenzene	0.39	0.11	mg/kg	8260B	03/07/11	100	
1,3,5-Trimethylbenzene	0.14	0.11	mg/kg	8260B	03/07/11	100	
Vinyl chloride	BDL	0.11	mg/kg	8260B	03/07/11	100	
Xylenes, Total	0.52	0.34	mg/kg	8260B	03/07/11	100	
Surrogate Recovery				% Rec.	8260B	03/07/11	100
Toluene-d8	106.			% Rec.	8260B	03/07/11	100
Dibromofluoromethane	98.2			% Rec.	8260B	03/07/11	100
4-Bromofluorobenzene	116.			% Rec.	8260B	03/07/11	100

Ohio DRO

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

This report shall not be reproduced, except in full, without the written approval from ESC.

The reported analytical results relate only to the sample submitted

L504877-01 (V8260HFX) - Non-target compounds too high to run at a lower dilution.



L·A·B S·C·I·E·N·C·E·S

YOUR LAB OF CHOICE

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 759-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

March 11, 2011

Mike Lacher
Geotechnical Consultants, Inc.
720 Greencrest Drive
Westerville, OH 43081

ESC Sample #: L504877-01

Date Received : March 05, 2011
Description : S. Yale Ave.

Site ID :

Sample ID : EB-1 0-4 FT

Project # : 11-E-16097A

Collected By : Mike Lacher
Collection Date : 03/03/11 13:20

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
C10-C20 Hydrocarbons	3100	91.	mg/kg	8015M	03/07/11	20
C20-C34 Hydrocarbons	3900	91.	mg/kg	8015M	03/07/11	20
Surrogate Recovery			% Rec.	8015M	03/07/11	20
o-Terphenyl	0.00					
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	1.9	mg/kg	8270C	03/11/11	50
Acenaphthene	BDL	1.9	mg/kg	8270C	03/11/11	50
Acenaphthylene	BDL	1.9	mg/kg	8270C	03/11/11	50
Benzo(a)anthracene	BDL	1.9	mg/kg	8270C	03/11/11	50
Benzo(a)pyrene	BDL	1.9	mg/kg	8270C	03/11/11	50
Benzo(b)fluoranthene	BDL	1.9	mg/kg	8270C	03/11/11	50
Benzo(g,h,i)perylene	BDL	1.9	mg/kg	8270C	03/11/11	50
Benzo(k)fluoranthene	BDL	1.9	mg/kg	8270C	03/11/11	50
Chrysene	BDL	1.9	mg/kg	8270C	03/11/11	50
Dibenz(a,h)anthracene	BDL	1.9	mg/kg	8270C	03/11/11	50
Fluoranthene	2.7	1.9	mg/kg	8270C	03/11/11	50
Fluorocene	BDL	1.9	mg/kg	8270C	03/11/11	50
Indeno(1,2,3-cd)pyrene	BDL	1.9	mg/kg	8270C	03/11/11	50
Naphthalene	BDL	1.9	mg/kg	8270C	03/11/11	50
Phenanthrene	BDL	1.9	mg/kg	8270C	03/11/11	50
Pyrene	2.4	1.9	mg/kg	8270C	03/11/11	50
Surrogate Recovery			% Rec.	8270C	03/11/11	50
Nitrobenzene-d5	0.00		% Rec.	8270C	03/11/11	50
2-Fluorobiphenyl	0.00		% Rec.	8270C	03/11/11	50
p-Terphenyl-d14	0.00		% Rec.	8270C	03/11/11	50

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

This report shall not be reproduced, except in full, without the written approval from ESC.

The reported analytical results relate only to the sample submitted

Reported: 03/11/11 17:06 Printed: 03/11/11 17:07

L504877-01 (V8260HEX) - Non-target compounds too high to run at a lower dilution.



L.A.B S.C.I.E.N.C.E.S

YOUR LAB OF CHOICE

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5850
1-800-767-5859
Fax (615) 758-5859

Tax I.D. # 62-0814289

Est. 1970

REPORT OF ANALYSIS

March 11, 2011

Mike Lacher
Geotechnical Consultants, Inc.
720 Greencrest Drive
Westerville, OH 43081

ESC Sample #: L504877-02

Date Received : March 05, 2011
Description : S. Yale Ave.

Site ID :

Sample ID : EB-2 6-8 FT

Project #: 11-E-16097A

Collected By : Mike Lacher
Collection Date : 03/03/11 15:15

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	83.		%	2540G	03/11/11	1
Mercury	0.040	0.024	mg/kg	7471	03/08/11	1
Arsenic	9.5	6.0	mg/kg	6010B	03/10/11	5
Barium	170	0.30	mg/kg	6010B	03/10/11	1
Cadmium	1.2	0.30	mg/kg	6010B	03/10/11	1
Chromium	18.	0.60	mg/kg	6010B	03/10/11	1
Lead	26.	0.30	mg/kg	6010B	03/10/11	1
Selenium	BDL	1.2	mg/kg	6010B	03/10/11	1
Silver	BDL	0.60	mg/kg	6010B	03/10/11	1
TPH C6 - C12	1.0	0.60	mg/kg	8015	03/07/11	5
Surrogate Recovery-%			% Rec.			
a,a,a-Trifluorotoluene(FID)	105.		% Rec.	8015	03/07/11	5
Volatile Organics						
Acetone	BDL	0.30	mg/kg	8260B	03/06/11	5
Acrylonitrile	BDL	0.060	mg/kg	8260B	03/06/11	5
Benzene	BDL	0.0060	mg/kg	8260B	03/06/11	5
Bromobenzene	BDL	0.0060	mg/kg	8260B	03/06/11	5
Bromodichloromethane	BDL	0.0060	mg/kg	8260B	03/06/11	5
Bromoform	BDL	0.0060	mg/kg	8260B	03/06/11	5
Bromomethane	BDL	0.030	mg/kg	8260B	03/06/11	5
n-Butylbenzene	0.012	0.0060	mg/kg	8260B	03/06/11	5
sec-Butylbenzene	0.016	0.0060	mg/kg	8260B	03/06/11	5
tert-Butylbenzene	BDL	0.0060	mg/kg	8260B	03/06/11	5
Carbon tetrachloride	BDL	0.0060	mg/kg	8260B	03/06/11	5
Chlorobenzene	BDL	0.0060	mg/kg	8260B	03/06/11	5
Chlorodibromomethane	BDL	0.030	mg/kg	8260B	03/06/11	5
Chloroethane	BDL	0.30	mg/kg	8260B	03/06/11	5
2-Chloroethyl vinyl ether	BDL	0.030	mg/kg	8260B	03/06/11	5
Chloroform	BDL	0.030	mg/kg	8260B	03/06/11	5
Chloromethane	BDL	0.015	mg/kg	8260B	03/06/11	5
2-Chlorotoluene	BDL	0.0060	mg/kg	8260B	03/06/11	5
4-Chlorotoluene	BDL	0.0060	mg/kg	8260B	03/06/11	5
1,2-Dibromo-3-Chloropropane	BDL	0.030	mg/kg	8260B	03/06/11	5
1,2-Dibromoethane	BDL	0.0060	mg/kg	8260B	03/06/11	5
Dibromomethane	BDL	0.0060	mg/kg	8260B	03/06/11	5
1,2-Dichlorobenzene	BDL	0.0060	mg/kg	8260B	03/06/11	5
1,3-Dichlorobenzene	BDL	0.0060	mg/kg	8260B	03/06/11	5
1,4-Dichlorobenzene	BDL	0.0060	mg/kg	8260B	03/06/11	5
Dichlorodifluoromethane	BDL	0.030	mg/kg	8260B	03/06/11	5
1,1-Dichloroethane	BDL	0.0060	mg/kg	8260B	03/06/11	5

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

This report shall not be reproduced, except in full, without the written approval from ESC.
The reported analytical results relate only to the sample submitted



LIA-B S-C-I-E-N-C-E-S

YOUR LAB OF CHOICE

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

March 11, 2011

Mike Lacher
Geotechnical Consultants, Inc.
720 Greencrest Drive
Westerville, OH 43081

ESC Sample # : L504877-02

Date Received : March 05, 2011
Description : S. Yale Ave.

Site ID :

Sample ID : EB-2 6-8 FT

Project # : 11-E-16097A

Collected By : Mike Lacher
Collection Date : 03/03/11 15:15

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.	
1,2-Dichloroethane	BDL	0.0060	mg/kg	8260B	03/06/11	5	
1,1-Dichloroethene	BDL	0.0060	mg/kg	8260B	03/06/11	5	
cis-1,2-Dichloroethene	BDL	0.0060	mg/kg	8260B	03/06/11	5	
trans-1,2-Dichloroethene	BDL	0.0060	mg/kg	8260B	03/06/11	5	
1,2-Dichloropropane	BDL	0.0060	mg/kg	8260B	03/06/11	5	
1,1-Dichloropropene	BDL	0.0060	mg/kg	8260B	03/06/11	5	
1,3-Dichloropropane	BDL	0.0060	mg/kg	8260B	03/06/11	5	
cis-1,3-Dichloropropene	BDL	0.0060	mg/kg	8260B	03/06/11	5	
trans-1,3-Dichloropropene	BDL	0.0060	mg/kg	8260B	03/06/11	5	
2,2-Dichloropropane	BDL	0.0060	mg/kg	8260B	03/06/11	5	
Di-isopropyl ether	BDL	0.0060	mg/kg	8260B	03/06/11	5	
Ethylbenzene	0.0067	0.0060	mg/kg	8260B	03/06/11	5	
Hexachloro-1,3-butadiene	BDL	0.0060	mg/kg	8260B	03/06/11	5	
n-Hexane	BDL	0.060	mg/kg	8260B	03/06/11	5	
Isopropylbenzene	0.0070	0.0060	mg/kg	8260B	03/06/11	5	
p-Isopropyltoluene	0.0068	0.0060	mg/kg	8260B	03/06/11	5	
2-Butanone (MEK)	BDL	0.060	mg/kg	8260B	03/06/11	5	
Methylene Chloride	BDL	0.030	mg/kg	8260B	03/06/11	5	
4-Methyl-2-pentanone (MIBK)	BDL	0.060	mg/kg	8260B	03/06/11	5	
Methyl tert-butyl ether	BDL	0.0060	mg/kg	8260B	03/06/11	5	
Naphthalene	BDL	0.030	mg/kg	8260B	03/06/11	5	
n-Propylbenzene	0.011	0.0060	mg/kg	8260B	03/06/11	5	
Styrene	BDL	0.0060	mg/kg	8260B	03/06/11	5	
1,1,1,2-Tetrachloroethane	BDL	0.0060	mg/kg	8260B	03/06/11	5	
1,1,2,2-Tetrachloroethane	BDL	0.0060	mg/kg	8260B	03/06/11	5	
Tetrachloroethene	BDL	0.0060	mg/kg	8260B	03/06/11	5	
Toluene	BDL	0.030	mg/kg	8260B	03/06/11	5	
1,2,3-Trichlorobenzene	BDL	0.0060	mg/kg	8260B	03/06/11	5	
1,2,4-Trichlorobenzene	BDL	0.0060	mg/kg	8260B	03/06/11	5	
1,1,1-Trichloroethane	BDL	0.0060	mg/kg	8260B	03/06/11	5	
1,1,2-Trichloroethane	BDL	0.0060	mg/kg	8260B	03/06/11	5	
Trichloroethene	BDL	0.0060	mg/kg	8260B	03/06/11	5	
Trichlorofluoromethane	BDL	0.030	mg/kg	8260B	03/06/11	5	
1,2,3-Trichloropropane	BDL	0.015	mg/kg	8260B	03/06/11	5	
1,2,4-Trimethylbenzene	0.037	0.0060	mg/kg	8260B	03/06/11	5	
1,3,5-Trimethylbenzene	0.010	0.0060	mg/kg	8260B	03/06/11	5	
Vinyl chloride	BDL	0.0060	mg/kg	8260B	03/06/11	5	
Xylenes, Total	0.024	0.018	mg/kg	8260B	03/06/11	5	
Surrogate Recovery				% Rec.	8260B	03/06/11	5
Toluene-d8	104.			% Rec.	8260B	03/06/11	5
Dibromofluoromethane	103.			% Rec.	8260B	03/06/11	5
4-Bromofluorobenzene	99.6						

Ohio DRO

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

This report shall not be reproduced, except in full, without the written approval from ESC.
The reported analytical results relate only to the sample submitted



YOUR LAB OF CHOICE

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 759-5658
1-800-767-5859
Fax (615) 750-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

March 11, 2011

Mike Lacher
Geotechnical Consultants, Inc.
720 Greencrest Drive
Westerville, OH 43081

ESC Sample #: L504877-02

Date Received : March 05, 2011

Site ID :

Description : S. Yale Ave.

Project # : 11-E-16097A

Sample ID : EB-2 6-8 FT

Collected By : Mike Lacher
Collection Date : 03/03/11 15:15

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
C10-C20 Hydrocarbons	BDL	4.8	mg/kg	8015M	03/07/11	1
C20-C34 Hydrocarbons	10.	4.8	mg/kg	8015M	03/07/11	1
Surrogate Recovery			% Rec.			
o-Terphenyl	71.4				03/07/11	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.040	mg/kg	8270C	03/11/11	1
Acenaphthene	BDL	0.040	mg/kg	8270C	03/11/11	1
Acenaphthylene	BDL	0.040	mg/kg	8270C	03/11/11	1
Benzo(a)anthracene	0.12	0.040	mg/kg	8270C	03/11/11	1
Benzo(a)pyrene	0.090	0.040	mg/kg	8270C	03/11/11	1
Benzo(b)fluoranthene	0.12	0.040	mg/kg	8270C	03/11/11	1
Benzo(g,h,i)perylene	0.043	0.040	mg/kg	8270C	03/11/11	1
Benzo(k)fluoranthene	0.050	0.040	mg/kg	8270C	03/11/11	1
Chrysene	0.089	0.040	mg/kg	8270C	03/11/11	1
Dibenz(a,h)anthracene	BDL	0.040	mg/kg	8270C	03/11/11	1
Fluoranthene	0.20	0.040	mg/kg	8270C	03/11/11	1
Fluorene	BDL	0.040	mg/kg	8270C	03/11/11	1
Indeno(1,2,3-cd)pyrene	0.043	0.040	mg/kg	8270C	03/11/11	1
Naphthalene	BDL	0.040	mg/kg	8270C	03/11/11	1
Phenanthrene	0.099	0.040	mg/kg	8270C	03/11/11	1
Pyrene	0.17	0.040	mg/kg	8270C	03/11/11	1
Surrogate Recovery			% Rec.			
Nitrobenzene-d5	72.3		% Rec.		03/11/11	1
2-Fluorobiphenyl	68.0		% Rec.		03/11/11	1
p-Terphenyl-d14	66.0		% Rec.		03/11/11	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

This report shall not be reproduced, except in full, without the written approval from ESC.
The reported analytical results relate only to the sample submitted

Reported: 03/11/11 17:06 Printed: 03/11/11 17:07



L A B S C I E N C E S

YOUR LAB OF CHOICE

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-757-5859
Fax (615) 758-5859

Tax I.D. #2-0814289

Est. 1970

REPORT OF ANALYSIS

March 11, 2011

Mike Lacher
Geotechnical Consultants, Inc.
720 Greencrest Drive
Westerville, OH 43081

ESC Sample #: L504877-03

Date Received : March 05, 2011
Description : S. Yale Ave.

Site ID :

Sample ID : EB-5 6-8 FT

Project #: 11-E-16097A

Collected By : Mike Lacher
Collection Date : 03/03/11 12:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	78.		%	2540G	03/11/11	1
Mercury	0.028	0.026	mg/kg	7471	03/09/11	1
Arsenic	12.	1.3	mg/kg	6010B	03/10/11	1
Barium	180	0.32	mg/kg	6010B	03/10/11	1
Cadmium	1.6	0.32	mg/kg	6010B	03/10/11	1
Chromium	23.	0.64	mg/kg	6010B	03/10/11	1
Lead	18.	0.32	mg/kg	6010B	03/10/11	1
Selenium	BDL	1.3	mg/kg	6010B	03/10/11	1
Silver	BDL	0.64	mg/kg	6010B	03/10/11	1
TPH C6 - C12	BDL	0.64	mg/kg	8015	03/07/11	5
Surrogate Recovery-%			% Rec.	8015	03/07/11	5
a,a,a-Trifluorotoluene (FID)	106.					
Volatile Organics						
Acetone	BDL	0.32	mg/kg	8260B	03/07/11	5
Acrylonitrile	BDL	0.064	mg/kg	8260B	03/07/11	5
Benzene	BDL	0.0064	mg/kg	8260B	03/07/11	5
Bromobenzene	BDL	0.0064	mg/kg	8260B	03/07/11	5
Bromodichloromethane	BDL	0.0064	mg/kg	8260B	03/07/11	5
Bromoform	BDL	0.0064	mg/kg	8260B	03/07/11	5
Bromomethane	BDL	0.032	mg/kg	8260B	03/07/11	5
n-Butylbenzene	BDL	0.0064	mg/kg	8260B	03/07/11	5
sec-Butylbenzene	BDL	0.0064	mg/kg	8260B	03/07/11	5
tet-Butylbenzene	BDL	0.0064	mg/kg	8260B	03/07/11	5
Carbon tetrachloride	BDL	0.0064	mg/kg	8260B	03/07/11	5
Chlorobenzene	BDL	0.0064	mg/kg	8260B	03/07/11	5
Chlorodibromomethane	BDL	0.0064	mg/kg	8260B	03/07/11	5
Chloroethane	BDL	0.032	mg/kg	8260B	03/07/11	5
2-Chloroethyl vinyl ether	BDL	0.32	mg/kg	8260B	03/07/11	5
Chloroform	BDL	0.032	mg/kg	8260B	03/07/11	5
Chloromethane	BDL	0.016	mg/kg	8260B	03/07/11	5
2-Chlorotoluene	BDL	0.0064	mg/kg	8260B	03/07/11	5
4-Chlorotoluene	BDL	0.0064	mg/kg	8260B	03/07/11	5
1,2-Dibromo-3-Chloropropane	BDL	0.032	mg/kg	8260B	03/07/11	5
1,2-Dibromoethane	BDL	0.0064	mg/kg	8260B	03/07/11	5
Dibromomethane	BDL	0.0064	mg/kg	8260B	03/07/11	5
1,2-Dichlorobenzene	BDL	0.0064	mg/kg	8260B	03/07/11	5
1,3-Dichlorobenzene	BDL	0.0064	mg/kg	8260B	03/07/11	5
1,4-Dichlorobenzene	BDL	0.0064	mg/kg	8260B	03/07/11	5
Dichlorodifluoromethane	BDL	0.032	mg/kg	8260B	03/07/11	5
1,1-Dichloroethane	BDL	0.0064	mg/kg	8260B	03/07/11	5

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

This report shall not be reproduced, except in full, without the written approval from ESC.
The reported analytical results relate only to the sample submitted



L-A-B S-C-I-E-N-C-E-S

YOUR LAB OF CHOICE

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5856
1-800-767-5859
Fax (615) 758-5859

Fax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

March 11, 2011

Mike Lacher
Geotechnical Consultants, Inc.,
720 Greencrest Drive
Westerville, OH 43081

ESC Sample # : L504877-03

Date Received : March 05, 2011
Description : S. Yale Ave.

Site ID :

Sample ID : EB-5 6-8 FT

Project # : 11-E-16097A

Collected By : Mike Lacher
Collection Date : 03/03/11 12:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
1,2-Dichloroethane	BDL	0.0064	mg/kg	8260B	03/07/11	5
1,1-Dichloroethene	BDL	0.0064	mg/kg	8260B	03/07/11	5
cis-1,2-Dichloroethene	BDL	0.0064	mg/kg	8260B	03/07/11	5
trans-1,2-Dichloroethene	BDL	0.0064	mg/kg	8260B	03/07/11	5
1,2-Dichloropropane	BDL	0.0064	mg/kg	8260B	03/07/11	5
1,1-Dichloropropane	BDL	0.0064	mg/kg	8260B	03/07/11	5
1,3-Dichloropropane	BDL	0.0064	mg/kg	8260B	03/07/11	5
cis-1,3-Dichloropropene	BDL	0.0064	mg/kg	8260B	03/07/11	5
trans-1,3-Dichloropropene	BDL	0.0064	mg/kg	8260B	03/07/11	5
2,2-Dichloropropane	BDL	0.0064	mg/kg	8260B	03/07/11	5
Di-isopropyl ether	BDL	0.0064	mg/kg	8260B	03/07/11	5
Ethylbenzene	BDL	0.0064	mg/kg	8260B	03/07/11	5
Hexachloro-1,3-butadiene	BDL	0.0064	mg/kg	8260B	03/07/11	5
n-Hexane	BDL	0.064	mg/kg	8260B	03/07/11	5
Isopropylbenzene	BDL	0.0064	mg/kg	8260B	03/07/11	5
p-Isopropyltoluene	BDL	0.0064	mg/kg	8260B	03/07/11	5
2-Butanone (MEK)	BDL	0.064	mg/kg	8260B	03/07/11	5
Methylene Chloride	BDL	0.032	mg/kg	8260B	03/07/11	5
4-Methyl-2-pentanone (MIBK)	BDL	0.064	mg/kg	8260B	03/07/11	5
Methyl tert-butyl ether	BDL	0.0064	mg/kg	8260B	03/07/11	5
Naphthalene	BDL	0.032	mg/kg	8260B	03/07/11	5
n-Propylbenzene	BDL	0.0064	mg/kg	8260B	03/07/11	5
Styrene	BDL	0.0064	mg/kg	8260B	03/07/11	5
1,1,2-Tetrachloroethane	BDL	0.0064	mg/kg	8260B	03/07/11	5
1,1,2,2-Tetrachloroethane	BDL	0.0064	mg/kg	8260B	03/07/11	5
Tetrachloroethene	BDL	0.0064	mg/kg	8260B	03/07/11	5
Toluene	BDL	0.032	mg/kg	8260B	03/07/11	5
1,2,3-Trichlorobenzene	BDL	0.0064	mg/kg	8260B	03/07/11	5
1,2,4-Trichlorobenzene	BDL	0.0064	mg/kg	8260B	03/07/11	5
1,1,1-Trichloroethane	BDL	0.0064	mg/kg	8260B	03/07/11	5
1,1,2-Trichloroethane	BDL	0.0064	mg/kg	8260B	03/07/11	5
Trichloroethene	BDL	0.0064	mg/kg	8260B	03/07/11	5
Trichlorofluoromethane	BDL	0.032	mg/kg	8260B	03/07/11	5
1,2,3-Trichloropropane	BDL	0.016	mg/kg	8260B	03/07/11	5
1,2,4-Trimethylbenzene	BDL	0.0064	mg/kg	8260B	03/07/11	5
1,3,5-Trimethylbenzene	BDL	0.0064	mg/kg	8260B	03/07/11	5
Vinyl chloride	BDL	0.0064	mg/kg	8260B	03/07/11	5
Xylenes, Total	BDL	0.019	mg/kg	8260B	03/07/11	5
Surrogate Recovery						
Toluene-d8	99.8		% Rec.	8260B	03/07/11	5
Dibromofluoromethane	99.7		% Rec.	8260B	03/07/11	5
4-Bromofluorobenzene	106*		% Rec.	8260B	03/07/11	5

Ohio DRO

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

This report shall not be reproduced, except in full, without the written approval from ESC.
The reported analytical results relate only to the sample submitted



LAB SCIENCES

YOUR LAB OF CHOICE

12065 Lebanon Rd,
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5858
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

March 11, 2011

Mike Lacher
Geotechnical Consultants, Inc.
720 Greencrest Drive
Westerville, OH 43081

ESC Sample #: L504877-03

Date Received : March 05, 2011
Description : S. Yale Ave.

Site ID :

Sample ID : EB-5 6-8 FT

Project #: 11-E-16097A

Collected By : Mike Lacher
Collection Date : 03/03/11 12:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
C10-C20 Hydrocarbons	BDL	5.1	mg/kg	8015M	03/07/11	1
C20-C34 Hydrocarbons	BDL	5.1	mg/kg	8015M	03/07/11	1
Surrogate Recovery			% Rec.	8015M	03/07/11	1
o-Terphenyl	69.9					
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.042	mg/kg	8270C	03/11/11	1
Acenaphthene	BDL	0.042	mg/kg	8270C	03/11/11	1
Acenaphthylene	BDL	0.042	mg/kg	8270C	03/11/11	1
Benzo(a)anthracene	BDL	0.042	mg/kg	8270C	03/11/11	1
Benzo(a)pyrene	BDL	0.042	mg/kg	8270C	03/11/11	1
Benzo(b)fluoranthene	BDL	0.042	mg/kg	8270C	03/11/11	1
Benzo(g,h,i)perylene	BDL	0.042	mg/kg	8270C	03/11/11	1
Benzo(k)fluoranthene	BDL	0.042	mg/kg	8270C	03/11/11	1
Chrysene	BDL	0.042	mg/kg	8270C	03/11/11	1
Dibenz(a,h)anthracene	BDL	0.042	mg/kg	8270C	03/11/11	1
Fluoranthene	BDL	0.042	mg/kg	8270C	03/11/11	1
Fluorene	BDL	0.042	mg/kg	8270C	03/11/11	1
Indeno(1,2,3-cd)pyrene	BDL	0.042	mg/kg	8270C	03/11/11	1
Naphthalene	BDL	0.042	mg/kg	8270C	03/11/11	1
Phenanthrene	BDL	0.042	mg/kg	8270C	03/11/11	1
Pyrene	BDL	0.042	mg/kg	8270C	03/11/11	1
Surrogate Recovery			% Rec.	8270C	03/11/11	1
Nitrobenzene-d5	48.8		% Rec.	8270C	03/11/11	1
2-Fluorobiphenyl	57.4		% Rec.	8270C	03/11/11	1
p-Terphenyl-d14	63.3		% Rec.	8270C	03/11/11	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

This report shall not be reproduced, except in full, without the written approval from ESC.
The reported analytical results relate only to the sample submitted

Reported: 03/11/11 17:06 Printed: 03/11/11 17:07



L-A-B S-C-I-E-N-C-E-S

YOUR LAB OF CHOICE

12985 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5850
1-880-767-5859
Fax (615) 758-5859

Tax I.D. # 62-0814269

Est. 1970

REPORT OF ANALYSIS

March 11, 2011

Mike Lacher
Geotechnical Consultants, Inc.
720 Greencrest Drive
Westerville, OH 43081

ESC Sample #: L504877-04

Date Received : March 05, 2011
Description : S. Yale Ave.

Site ID :

Sample ID : EB-6 0-2 FT

Project #: 11-E-16097A

Collected By : Mike Lacher
Collection Date : 03/03/11 10:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	77.		%	2540G	03/11/11	1
Mercury	0.24	0.026	mg/kg	7471	03/08/11	1
Arsenic	9.8	1.3	mg/kg	6010B	03/10/11	1
Barium	210	0.32	mg/kg	6010B	03/10/11	1
Cadmium	1.7	0.32	mg/kg	6010B	03/10/11	1
Chromium	19.	0.65	mg/kg	6010B	03/10/11	1
Lead	110	0.32	mg/kg	6010B	03/10/11	1
Selenium	BDL	1.3	mg/kg	6010B	03/10/11	1
Silver	BDL	0.65	mg/kg	6010B	03/10/11	1
TPH C6 - C12	BDL	0.65	mg/kg	8015	03/07/11	5
Surrogate Recovery-%			% Rec.	8015	03/07/11	5
a,a,a-Trifluorotoluene(FID)	106.					
Volatile Organics						
Acetone	BDL	0.32	mg/kg	8260B	03/06/11	5
Acrylonitrile	BDL	0.065	mg/kg	8260B	03/06/11	5
Benzene	BDL	0.0065	mg/kg	8260B	03/06/11	5
Bromobenzene	BDL	0.0065	mg/kg	8260B	03/06/11	5
Bromodichloromethane	BDL	0.0065	mg/kg	8260B	03/06/11	5
Bromoform	BDL	0.0065	mg/kg	8260B	03/06/11	5
Bromomethane	BDL	0.032	mg/kg	8260B	03/06/11	5
n-Butylbenzene	BDL	0.0065	mg/kg	8260B	03/06/11	5
sec-Butylbenzene	BDL	0.0065	mg/kg	8260B	03/06/11	5
tert-Butylbenzene	BDL	0.0065	mg/kg	8260B	03/06/11	5
Carbon tetrachloride	BDL	0.0065	mg/kg	8260B	03/06/11	5
Chlorobenzene	BDL	0.0065	mg/kg	8260B	03/06/11	5
Chlorodibromomethane	BDL	0.0065	mg/kg	8260B	03/06/11	5
Chloroethane	BDL	0.032	mg/kg	8260B	03/06/11	5
2-Chloroethyl vinyl ether	BDL	0.32	mg/kg	8260B	03/06/11	5
Chloroform	BDL	0.032	mg/kg	8260B	03/06/11	5
Chloromethane	BDL	0.016	mg/kg	8260B	03/06/11	5
2-Chlorotoluene	BDL	0.0065	mg/kg	8260B	03/06/11	5
4-Chlorotoluene	BDL	0.0065	mg/kg	8260B	03/06/11	5
1,2-Dibromo-3-Chloropropane	BDL	0.032	mg/kg	8260B	03/06/11	5
1,2-Dibromoethane	BDL	0.0065	mg/kg	8260B	03/06/11	5
Dibromomethane	BDL	0.0065	mg/kg	8260B	03/06/11	5
1,2-Dichlorobenzene	BDL	0.0065	mg/kg	8260B	03/06/11	5
1,3-Dichlorobenzene	BDL	0.0065	mg/kg	8260B	03/06/11	5
1,4-Dichlorobenzene	BDL	0.0065	mg/kg	8260B	03/06/11	5
Dichlorodifluoromethane	BDL	0.032	mg/kg	8260B	03/06/11	5
1,1-Dichloroethane	BDL	0.0065	mg/kg	8260B	03/06/11	5

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

This report shall not be reproduced, except in full, without the written approval from ESC.
The reported analytical results relate only to the sample submitted



L-A-B S-C-I-E-N-C-E-S

YOUR LAB OF CHOICE

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5859
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

March 11, 2011

Mike Lacher
Geotechnical Consultants, Inc.
720 Greencrest Drive
Westerville, OH 43081

ESC Sample # : LS04877-04

Date Received : March 05, 2011
Description : S. Yale Ave.

Site ID :

Sample ID : EB-6 0-2 FT

Project # : 11-E-16097A

Collected By : Mike Lacher
Collection Date : 03/03/11 10:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
1,2-Dichloroethane	BDL	0.0065	mg/kg	8260B	03/06/11	5
1,1-Dichloroethene	BDL	0.0065	mg/kg	8260B	03/06/11	5
cis-1,2-Dichloroethene	BDL	0.0065	mg/kg	8260B	03/06/11	5
trans-1,2-Dichloroethene	RDL	0.0065	mg/kg	8260B	03/06/11	5
1,2-Dichloropropane	BDL	0.0065	mg/kg	8260B	03/06/11	5
1,1-Dichloropropene	BDL	0.0065	mg/kg	8260B	03/06/11	5
1,3-Dichloropropene	BDL	0.0065	mg/kg	8260B	03/06/11	5
cis-1,3-Dichloropropene	BDL	0.0065	mg/kg	8260B	03/06/11	5
trans-1,3-Dichloropropene	BDL	0.0065	mg/kg	8260B	03/06/11	5
2,2-Dichloropropane	BDL	0.0065	mg/kg	8260B	03/06/11	5
Di-isopropyl ether	BDL	0.0065	mg/kg	8260B	03/06/11	5
Ethylbenzene	BDL	0.0065	mg/kg	8260B	03/06/11	5
Hexachloro-1,3-butadiene	BDL	0.065	mg/kg	8260B	03/06/11	5
n-Hexane	BDL	0.0065	mg/kg	8260B	03/06/11	5
Isopropylbenzene	BDL	0.0065	mg/kg	8260B	03/06/11	5
p-Isopropyltoluene	BDL	0.065	mg/kg	8260B	03/06/11	5
2-Butanone (MEK)	BDL	0.032	mg/kg	8260B	03/06/11	5
Methylene Chloride	BDL	0.065	mg/kg	8260B	03/06/11	5
4-Methyl-2-pentanone (MIBK)	BDL	0.0065	mg/kg	8260B	03/06/11	5
Methyl tert-butyl ether	BDL	0.032	mg/kg	8260B	03/06/11	5
Naphthalene	BDL	0.0065	mg/kg	8260B	03/06/11	5
n-Propylbenzene	BDL	0.0065	mg/kg	8260B	03/06/11	5
Styrene	BDL	0.0065	mg/kg	8260B	03/06/11	5
1,1,1,2-Tetrachloroethane	BDL	0.0065	mg/kg	8260B	03/06/11	5
1,1,2,2-Tetrachloroethane	BDL	0.0065	mg/kg	8260B	03/06/11	5
Tetrachloroethene	BDL	0.0065	mg/kg	8260B	03/06/11	5
Toluene	BDL	0.032	mg/kg	8260B	03/06/11	5
1,2,3-Trichlorobenzene	BDL	0.0065	mg/kg	8260B	03/06/11	5
1,2,4-Trichlorobenzene	BDL	0.0065	mg/kg	8260B	03/06/11	5
1,1,1-Trichloroethane	BDL	0.0065	mg/kg	8260B	03/06/11	5
1,1,2-Trichloroethane	BDL	0.0065	mg/kg	8260B	03/06/11	5
Trichloroethene	BDL	0.0065	mg/kg	8260B	03/06/11	5
Trichlorofluoromethane	BDL	0.032	mg/kg	8260B	03/06/11	5
1,2,3-Trichloropropane	BDL	0.016	mg/kg	8260B	03/06/11	5
1,2,4-Trimethylbenzene	BDL	0.0065	mg/kg	8260B	03/06/11	5
1,3,5-Trimethylbenzene	BDL	0.0065	mg/kg	8260B	03/06/11	5
Vinyl chloride	BDL	0.0065	mg/kg	8260B	03/06/11	5
Xylenes, Total	BDL	0.019	mg/kg	8260B	03/06/11	5
Surrogate Recovery						
Toluene-d8	103.		% Rec.	8260B	03/06/11	5
Dibromofluoromethane	105.		% Rec.	8260B	03/06/11	5
4-Bromofluorobenzene	96.5		% Rec.	8260B	03/06/11	5

Ohio DRO

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

This report shall not be reproduced, except in full, without the written approval from ESC.
The reported analytical results relate only to the sample submitted



L-A-B S-C-I-E-N-C-E-S

YOUR LAB OF CHOICE

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

March 11, 2011

Mike Lacher
Geotechnical Consultants, Inc.
720 Greencrest Drive
Westerville, OH 43081

ESC Sample #: L504877-04

Date Received : March 05, 2011
Description : S. Yale Ave.

Site ID :

Sample ID : EB-6 0-2 FT

Project # : 11-E-16097A

Collected By : Mike Lacher
Collection Date : 03/03/11 10:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
C10-C20 Hydrocarbons	82.	5.2	mg/kg	8015M	03/07/11	1
C20-C34 Hydrocarbons	140	5.2	mg/kg	8015M	03/07/11	1
Surrogate Recovery			% Rec.			
o-Terphenyl	92.2		% Rec.	8015M	03/07/11	1
Polyaromatic Hydrocarbons						
Anthracene	4.0	0.85	mg/kg	8270C	03/11/11	20
Acenaphthene	1.3	0.85	mg/kg	8270C	03/11/11	20
Acenaphthylene	BDL	0.85	mg/kg	8270C	03/11/11	20
Benzo(a)anthracene	11.	0.85	mg/kg	8270C	03/11/11	20
Benzo(a)pyrene	8.0	0.85	mg/kg	8270C	03/11/11	20
Benzo(b)fluoranthene	13.	0.85	mg/kg	8270C	03/11/11	20
Benzo(g,h,i)perylene	2.1	0.85	mg/kg	8270C	03/11/11	20
Benzo(k)fluoranthene	3.5	0.85	mg/kg	8270C	03/11/11	20
Chrysene	7.9	0.85	mg/kg	8270C	03/11/11	20
Dibenz(a,h)anthracene	BDL	0.85	mg/kg	8270C	03/11/11	20
Fluoranthene	21.	0.85	mg/kg	8270C	03/11/11	20
Fluorene	1.2	0.85	mg/kg	8270C	03/11/11	20
Indeno(1,2,3-cd)pyrene	2.3	0.85	mg/kg	8270C	03/11/11	20
Naphthalene	BDL	0.85	mg/kg	8270C	03/11/11	20
Phenanthrene	18.	0.85	mg/kg	8270C	03/11/11	20
Pyrene	18.	0.85	mg/kg	8270C	03/11/11	20
Surrogate Recovery			% Rec.			
Nitrobenzene-d5	0.00		% Rec.	8270C	03/11/11	20
2-Fluorobiphenyl	0.00		% Rec.	8270C	03/11/11	20
p-Terphenyl-d14	0.00		% Rec.	8270C	03/11/11	20

Results listed are dry weight basis.

BDL = Below Detection Limit

Det. Limit = Practical Quantitation Limit (PQL)

Note:

This report shall not be reproduced, except in full, without the written approval from ESC.
The reported analytical results relate only to the sample submitted

Reported: 03/11/11 17:06 Printed: 03/11/11 17:07



L.A.B S.C.I.E.N.C.E.S

YOUR LAB OF CHOICE

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-762-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

March 11, 2011

Mike Lacher
Geotechnical Consultants, Inc.
720 Greencrest Drive
Westerville, OH 43081

ESC Sample # : L504877-05

Date Received : March 05, 2011
Description : S. Yale Ave.

Site ID :

Sample ID : EB-1

Project # : 11-E-16097A

Collected By : Mike Lacher
Collection Date : 03/03/11 13:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics						
Acetone	0.21	0.050	mg/l	8260B	03/08/11	1
Acrylonitrile	BDL	0.010	mg/l	8260B	03/08/11	1
Benzene	0.0024	0.0010	mg/l	8260B	03/08/11	1
Bromobenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
Bromodichloromethane	BDL	0.0010	mg/l	8260B	03/08/11	1
Bromoform	BDL	0.0010	mg/l	8260B	03/08/11	1
Bromomethane	BDL	0.0050	mg/l	8260B	03/08/11	1
n-Butylbenzene	0.015	0.0010	mg/l	8260B	03/08/11	1
sec-Butylbenzene	0.020	0.0010	mg/l	8260B	03/08/11	1
tert-Butylbenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
Carbon tetrachloride	BDL	0.0010	mg/l	8260B	03/08/11	1
Chlorobenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
Chlorodibromomethane	BDL	0.0010	mg/l	8260B	03/08/11	1
Chloroethane	BDL	0.0050	mg/l	8260B	03/08/11	1
2-Chloroethyl vinyl ether	BDL	0.050	mg/l	8260B	03/08/11	1
Chloroform	BDL	0.0050	mg/l	8260B	03/08/11	1
Chloromethane	BDL	0.0025	mg/l	8260B	03/08/11	1
2-Chlorotoluene	BDL	0.0010	mg/l	8260B	03/08/11	1
4-Chlorotoluene	BDL	0.0010	mg/l	8260B	03/08/11	1
1,2-Dibromo-3-Chloropropane	BDL	0.0050	mg/l	8260B	03/08/11	1
1,2-Dibromoethane	BDL	0.0010	mg/l	8260B	03/08/11	1
Dibromomethane	BDL	0.0010	mg/l	8260B	03/08/11	1
1,2-Dichlorobenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
1,3-Dichlorobenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
1,4-Dichlorobenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
Dichlorodifluoromethane	BDL	0.0050	mg/l	8260B	03/08/11	1
1,1-Dichloroethane	BDL	0.0010	mg/l	8260B	03/08/11	1
1,2-Dichloroethane	BDL	0.0010	mg/l	8260B	03/08/11	1
1,1-Dichloroethene	BDL	0.0010	mg/l	8260B	03/08/11	1
cis-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	03/08/11	1
trans-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	03/08/11	1
1,2-Dichloropropane	BDL	0.0010	mg/l	8260B	03/08/11	1
1,1-Dichloropropene	BDL	0.0010	mg/l	8260B	03/08/11	1
1,3-Dichloropropane	BDL	0.0010	mg/l	8260B	03/08/11	1
cis-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	03/08/11	1
trans-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	03/08/11	1
2,2-Dichloropropane	BDL	0.0010	mg/l	8260B	03/08/11	1
Di-isopropyl ether	BDL	0.0010	mg/l	8260B	03/08/11	1
Ethylbenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
Hexachloro-1,3-butadiene	BDL	0.0010	mg/l	8260B	03/08/11	1
n-Hexane	BDL	0.010	mg/l	8260B	03/08/11	1
Isopropylbenzene	0.023	0.0010	mg/l	8260B	03/08/11	1
p-Isopropyltoluene	BDL	0.0010	mg/l	8260B	03/08/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

L504877-05 (V8260HEX) - Previous run also had high SURR recovery. Matrix effect.



L-A-B S-C-I-E-N-C-E-S

YOUR LAB OF CHOICE

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5856
1-800-767-5059
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

March 11, 2011

Mike Lacher
Geotechnical Consultants, Inc.
720 Greencrest Drive
Westerville, OH 43081

ESC Sample #: LS04877-05

Date Received : March 05, 2011
Description : S. Yale Ave.

Site ID :

Sample ID : EB-1

Project #: 11-E-16097A

Collected By : Mike Lacher
Collection Date : 03/03/11 13:30

Parameter	Result	Det. Limit	Units	Method	Date	Pil.
2-Butanone (MEK)	BDL	0.010	mg/l	8260B	03/08/11	1
Methylene Chloride	BDL	0.0050	mg/l	8260B	03/08/11	1
4-Methyl-2-pentanone (MIBK)	BDL	0.010	mg/l	8260B	03/08/11	1
Methyl tert-butyl ether	BDL	0.0010	mg/l	8260B	03/08/11	1
Naphthalene	0.0083	0.0050	mg/l	8260B	03/08/11	1
n-Propylbenzene	0.028	0.0010	mg/l	8260B	03/08/11	1
Styrene	BDL	0.0010	mg/l	8260B	03/08/11	1
1,1,1,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	03/08/11	1
1,1,2,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	03/08/11	1
Tetrachloroethene	BDL	0.0010	mg/l	8260B	03/08/11	1
Toluene	0.0051	0.0050	mg/l	8260B	03/08/11	1
1,2,3-Trichlorobenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
1,2,4-Trichlorobenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
1,1,1-Trichloroethane	BDL	0.0010	mg/l	8260B	03/08/11	1
1,1,2-Trichloroethane	BDL	0.0010	mg/l	8260B	03/08/11	1
Trichloroethene	BDL	0.0010	mg/l	8260B	03/08/11	1
Trichlorofluoromethane	BDL	0.0050	mg/l	8260B	03/08/11	1
1,2,3-Trichloropropane	BDL	0.0025	mg/l	8260B	03/08/11	1
1,2,4-Trimethylbenzene	0.0019	0.0010	mg/l	8260B	03/08/11	1
1,3,5-Trimethylbenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
Vinyl chloride	BDL	0.0010	mg/l	8260B	03/08/11	1
Xylenes, Total	0.0035	0.0030	mg/l	8260B	03/08/11	1
Surrogate Recovery						
Toluene-d8	147.	% Rec.		8260B	03/08/11	1
Dibromofluoromethane	96.1	% Rec.		8260B	03/08/11	1
a,a,a-Trifluorotoluene	104.	% Rec.		8260B	03/08/11	1
4-Bromofluorobenzene	125.	% Rec.		8260B	03/08/11	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.00045	mg/l	8270C-SIM	03/11/11	9.09
Acenaphthene	0.00084	0.00045	mg/l	8270C-SIM	03/11/11	9.09
Acenaphthylene	0.0012	0.00045	mg/l	8270C-SIM	03/11/11	9.09
Benzo(a)anthracene	0.0012	0.00045	mg/l	8270C-SIM	03/11/11	9.09
Benzo(a)pyrene	BDL	0.00045	mg/l	8270C-SIM	03/11/11	9.09
Benzo(b)fluoranthene	BDL	0.00045	mg/l	8270C-SIM	03/11/11	9.09
Benzo(g,h,i)perylene	BDL	0.00045	mg/l	8270C-SIM	03/11/11	9.09
Benzo(k)fluoranthene	BDL	0.00045	mg/l	8270C-SIM	03/11/11	9.09
Chrysene	0.0012	0.00045	mg/l	8270C-SIM	03/11/11	9.09
Dibenzo(a,h)anthracene	BDL	0.00045	mg/l	8270C-SIM	03/11/11	9.09
Fluoranthene	0.0012	0.00045	mg/l	8270C-SIM	03/11/11	9.09
Fluorene	0.00089	0.00045	mg/l	8270C-SIM	03/11/11	9.09
Indeno(1,2,3-cd)pyrene	BDL	0.00045	mg/l	8270C-SIM	03/11/11	9.09
Naphthalene	BDL	0.0091	mg/l	8270C-SIM	03/10/11	36.4
Phenanthrene	0.0018	0.00045	mg/l	8270C-SIM	03/11/11	9.09

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

LS04877-05 (V8260HEX) - Previous run also had high SURR recovery. Matrix effect.



L-A-B S-C-I-E-N-C-E-S

YOUR LAB OF CHOICE

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0014289

Est. 1970

REPORT OF ANALYSIS

March 11, 2011

Mike Lacher
Geotechnical Consultants, Inc.
720 Greencrest Drive
Westerville, OH 43081

ESC Sample # : L504877-05

Date Received : March 05, 2011
Description : S. Yale Ave.

Site ID :

Sample ID : EB-1

Project # : 11-E-16097A

Collected By : Mike Lacher
Collection Date : 03/03/11 13:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Pyrene	0.0012	0.00045	mg/l	8270C-SIM	03/11/11	9.09
1-Methylnaphthalene	0.060	0.0091	mg/l	8270C-SIM	03/10/11	36.4
2-Methylnaphthalene	BDL	0.0091	mg/l	8270C-SIM	03/10/11	36.4
2-Chloronaphthalene	BDL	0.0023	mg/l	8270C-SIM	03/11/11	9.09
Surrogate Recovery						
Nitrobenzene-d5	0.00		% Rec.	8270C-SIM	03/10/11	36.4
2-Fluorobiphenyl	96.8		% Rec.	8270C-SIM	03/11/11	9.09
p-Terphenyl-d14	97.9		% Rec.	8270C-SIM	03/11/11	9.09

BDL = Below Detection Limit

Det. Limit = Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 03/11/11 17:06 Printed: 03/11/11 17:07
L504877-05 (V8260HEX) - Previous run also had high SURR recovery. Matrix effect.



LIA-B S-C-I-E-N-C-E-S

YOUR LAB OF CHOICE

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5839
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

March 11, 2011

Mike Lacher
Geotechnical Consultants, Inc.
720 Greencrest Drive
Westerville, OH 43081

ESC Sample #: L504877-06

Date Received : March 05, 2011
Description : S. Yale Ave.

Site ID :

Sample ID : EB-2

Project # : 11-E-16097A

Collected By : Mike Lacher
Collection Date : 03/03/11 15:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics						
Acetone	BDL	0.050	mg/l	8260B	03/08/11	1
Acrylonitrile	BDL	0.010	mg/l	8260B	03/08/11	1
Benzene	0.0013	0.0010	mg/l	8260B	03/08/11	1
Bromobenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
Bromodichloromethane	BDL	0.0010	mg/l	8260B	03/08/11	1
Bromoform	BDL	0.0010	mg/l	8260B	03/08/11	1
Bromomethane	BDL	0.0050	mg/l	8260B	03/08/11	1
n-Butylbenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
sec-Butylbenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
tert-Butylbenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
Carbon tetrachloride	BDL	0.0010	mg/l	8260B	03/08/11	1
Chlorobenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
Chlorodibromomethane	BDL	0.0010	mg/l	8260B	03/08/11	1
Chloroethane	BDL	0.0050	mg/l	8260B	03/08/11	1
2-Chloroethyl vinyl ether	BDL	0.050	mg/l	8260B	03/08/11	1
Chloroform	BDL	0.0050	mg/l	8260B	03/08/11	1
Chloromethane	BDL	0.0025	mg/l	8260B	03/08/11	1
2-Chlorotoluene	BDL	0.0010	mg/l	8260B	03/08/11	1
4-Chlorotoluene	BDL	0.0010	mg/l	8260B	03/08/11	1
1,2-Dibromo-3-Chloropropane	BDL	0.0050	mg/l	8260B	03/08/11	1
1,2-Dibromoethane	BDL	0.0010	mg/l	8260B	03/08/11	1
Dibromomethane	BDL	0.0010	mg/l	8260B	03/08/11	1
1,2-Dichlorobenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
1,3-Dichlorobenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
1,4-Dichlorobenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
Dichlorodifluoromethane	BDL	0.0050	mg/l	8260B	03/08/11	1
1,1-Dichloroethane	BDL	0.0010	mg/l	8260B	03/08/11	1
1,2-Dichloroethane	BDL	0.0010	mg/l	8260B	03/08/11	1
1,1-Dichloroethene	BDL	0.0010	mg/l	8260B	03/08/11	1
cis-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	03/08/11	1
trans-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	03/08/11	1
1,2-Dichloropropane	BDL	0.0010	mg/l	8260B	03/08/11	1
1,1-Dichloropropene	BDL	0.0010	mg/l	8260B	03/08/11	1
1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	03/08/11	1
cis-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	03/08/11	1
trans-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	03/08/11	1
2,2-Dichloropropane	BDL	0.0010	mg/l	8260B	03/08/11	1
Di-isopropyl ether	BDL	0.0010	mg/l	8260B	03/08/11	1
Ethylbenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
Hexachloro-1,3-butadiene	BDL	0.0010	mg/l	8260B	03/08/11	1
n-Hexane	BDL	0.010	mg/l	8260B	03/08/11	1
Isopropylbenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
p-Isopropyltoluene	BDL	0.0010	mg/l	8260B	03/08/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

L504877-06 (SVAHSMV) - Diluted during the extraction process



YOUR LAB OF CHOICE

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

March 11, 2011

Mike Lacher
Geotechnical Consultants, Inc.
720 Greencrest Drive
Westerville, OH 43081

ESC Sample #: L504877-06

Date Received : March 05, 2011
Description : S. Yale Ave.

Site ID :

Sample ID : EB-2

Project #: 11-E-16097A

Collected By : Mike Lacher
Collection Date : 03/03/11 15:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
2-Butanone (MEK)	BDL	0.010	mg/l	8260B	03/08/11	1
Methylene Chloride	BDL	0.0050	mg/l	8260B	03/08/11	1
4-Methyl-2-pentanone (MIBK)	BDL	0.010	mg/l	8260B	03/08/11	1
Methyl tert-butyl ether	BDL	0.0010	mg/l	8260B	03/08/11	1
Naphthalene	BDL	0.0050	mg/l	8260B	03/08/11	1
n-Propylbenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
Styrene	BDL	0.0010	mg/l	8260B	03/08/11	1
1,1,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	03/08/11	1
1,1,2,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	03/08/11	1
Tetrachloroethene	BDL	0.0010	mg/l	8260B	03/08/11	1
Toluene	BDL	0.0050	mg/l	8260B	03/08/11	1
1,2,3-Trichlorobenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
1,2,4-Trichlorobenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
1,1,1-Trichloroethane	BDL	0.0010	mg/l	8260B	03/08/11	1
1,1,2-Trichloroethane	BDL	0.0010	mg/l	8260B	03/08/11	1
Trichloroethene	0.0031	0.0010	mg/l	8260B	03/08/11	1
Trichlorofluoromethane	BDL	0.0050	mg/l	8260B	03/08/11	1
1,2,3-Trichloropropane	BDL	0.0025	mg/l	8260B	03/08/11	1
1,2,4-Trimethylbenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
1,3,5-Trimethylbenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
Vinyl chloride	BDL	0.0010	mg/l	8260B	03/08/11	1
Xylenes, Total	BDL	0.0030	mg/l	8260B	03/08/11	1
Surrogate Recovery						
Toluene-d8	102.		% Rec.	8260B	03/08/11	1
Dibromofluoromethane	96.4		% Rec.	8260B	03/08/11	1
a,a,a-Trifluorotoluene	103.		% Rec.	8260B	03/08/11	1
4-Bromofluorobenzene	118.		% Rec.	8260B	03/08/11	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.00040	mg/l	8270C-SIM	03/11/11	8
Acenaphthene	BDL	0.00040	mg/l	8270C-SIM	03/11/11	8
Acenaphthylene	BDL	0.00040	mg/l	8270C-SIM	03/11/11	8
Benzo(a)anthracene	BDL	0.00040	mg/l	8270C-SIM	03/11/11	8
Benzo(a)pyrene	BDL	0.00040	mg/l	8270C-SIM	03/11/11	8
Benzo(b)fluoranthene	BDL	0.00040	mg/l	8270C-SIM	03/11/11	8
Benzo(g,h,i)perylene	BDL	0.00040	mg/l	8270C-SIM	03/11/11	8
Benzo(k)fluoranthene	BDL	0.00040	mg/l	8270C-SIM	03/11/11	8
Chrysene	BDL	0.00040	mg/l	8270C-SIM	03/11/11	8
Dibenz(a,h)anthracene	BDL	0.00040	mg/l	8270C-SIM	03/11/11	8
Fluoranthene	BDL	0.00040	mg/l	8270C-SIM	03/11/11	8
Fluorene	BDL	0.00040	mg/l	8270C-SIM	03/11/11	8
Indeno(1,2,3-cd)pyrene	BDL	0.00040	mg/l	8270C-SIM	03/11/11	8
Naphthalene	BDL	0.0020	mg/l	8270C-SIM	03/11/11	8
Phenanthrene	BDL	0.00040	mg/l	8270C-SIM	03/11/11	8

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

L504877-06 (SVPAHSIMLVI) - Diluted during the extraction process



YOUR LAB OF CHOICE

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

March 11, 2011

Mike Lacher
Geotechnical Consultants, Inc.
720 Greencrest Drive
Westerville, OH 43081

ESC Sample # : L504877-06

Date Received : March 05, 2011
Description : S. Yale Ave.

Site ID :

Sample ID : EB-2

Project # : 11-E-16097A

Collected By : Mike Lacher
Collection Date : 03/03/11 15:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Pyrene	BDL	0.00040	mg/l	8270C-SIM	03/11/11	8
1-Methylnaphthalene	BDL	0.0020	mg/l	8270C-SIM	03/11/11	8
2-Methylnaphthalene	BDL	0.0020	mg/l	8270C-SIM	03/11/11	8
2-Chloronaphthalene	BDL	0.0020	mg/l	8270C-SIM	03/11/11	8
Surrogate Recovery						
Nitrobenzene-d5	108.		% Rec.	8270C-SIM	03/11/11	8
2-Fluorobiphenyl	92.9		% Rec.	8270C-SIM	03/11/11	8
p-Terphenyl-d14	92.2		% Rec.	8270C-SIM	03/11/11	8

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 03/11/11 17:06 Printed: 03/11/11 17:07
L504877-06 (SVPAHSIMLVI) - Diluted during the extraction process



LIA-B S-C-I-E-N-C-E-S

YOUR LAB OF CHOICE

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0614289

Est. 1970

REPORT OF ANALYSIS

March 11, 2011

Mike Lacher
Geotechnical Consultants, Inc.
720 Greencrest Drive
Westerville, OH 43081

ESC Sample # : L504877-07

Date Received : March 05, 2011
Description : S. Yale Ave.

Site ID :

Sample ID : EB-5

Project # : 11-E-16097A

Collected By : Mike Lacher
Collection Date : 03/03/11 12:15

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics						
Acetone	BDL	0.050	mg/l	8260B	03/08/11	1
Acrylonitrile	BDL	0.010	mg/l	8260B	03/08/11	1
Benzene	BDL	0.0010	mg/l	8260B	03/08/11	1
Bromobenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
Bromodichloromethane	BDL	0.0010	mg/l	8260B	03/08/11	1
Bromoform	BDL	0.0010	mg/l	8260B	03/08/11	1
Bromomethane	BDL	0.0050	mg/l	8260B	03/08/11	1
n-Butylbenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
sec-Butylbenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
tert-Butylbenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
Carbon tetrachloride	BDL	0.0010	mg/l	8260B	03/08/11	1
Chlorobenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
Chlorodibromomethane	BDL	0.0010	mg/l	8260B	03/08/11	1
Chloroethane	BDL	0.0050	mg/l	8260B	03/08/11	1
2-Chloroethyl vinyl ether	BDL	0.050	mg/l	8260B	03/08/11	1
Chloroform	BDL	0.0050	mg/l	8260B	03/08/11	1
Chloromethane	BDL	0.0025	mg/l	8260B	03/08/11	1
2-Chlorotoluene	BDL	0.0010	mg/l	8260B	03/08/11	1
4-Chlorotoluene	BDL	0.0010	mg/l	8260B	03/08/11	1
1,2-Dibromo-3-Chloropropane	BDL	0.0050	mg/l	8260B	03/08/11	1
1,2-Dibromoethane	BDL	0.0010	mg/l	8260B	03/08/11	1
Dibromomethane	BDL	0.0010	mg/l	8260B	03/08/11	1
1,2-Dichlorobenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
1,3-Dichlorobenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
1,4-Dichlorobenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
Dichlorodifluoromethane	BDL	0.0050	mg/l	8260B	03/08/11	1
1,1-Dichloroethane	BDL	0.0010	mg/l	8260B	03/08/11	1
1,2-Dichloroethane	BDL	0.0010	mg/l	8260B	03/08/11	1
1,1-Dichloroethene	BDL	0.0010	mg/l	8260B	03/08/11	1
cis-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	03/08/11	1
trans-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	03/08/11	1
1,2-Dichloropropane	BDL	0.0010	mg/l	8260B	03/08/11	1
1,1-Dichloropropene	BDL	0.0010	mg/l	8260B	03/08/11	1
1,3-Dichloropropane	BDL	0.0010	mg/l	8260B	03/08/11	1
cis-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	03/08/11	1
trans-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	03/08/11	1
2,2-Dichloropropane	BDL	0.0010	mg/l	8260B	03/08/11	1
Di-isopropyl ether	BDL	0.0010	mg/l	8260B	03/08/11	1
Ethylbenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
Hexachloro-1,3-butadiene	BDL	0.0010	mg/l	8260B	03/08/11	1
n-Hexane	BDL	0.010	mg/l	8260B	03/08/11	1
Isopropylbenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
p-Isopropyltoluene	BDL	0.0010	mg/l	8260B	03/08/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)



L A B S C I E N C E S

YOUR LAB OF CHOICE

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0614289

Est. 1970

REPORT OF ANALYSIS

March 11, 2011

Mike Lacher
Geotechnical Consultants, Inc.
720 Greencrest Drive
Westerville, OH 43081

ESC Sample # : L504877-07

Date Received : March 05, 2011
Description : S. Yale Ave.

Site ID :

Sample ID : EB-5

Project # : 11-E-16097A

Collected By : Mike Lacher
Collection Date : 03/03/11 12:15

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
2-Butanone (MEK)	BDL	0.010	mg/l	8260B	03/08/11	1
Methylene Chloride	BDL	0.0050	mg/l	8260B	03/08/11	1
4-Methyl-2-pentanone (MIBK)	BDL	0.010	mg/l	8260B	03/08/11	1
Methyl tert-butyl ether	BDL	0.0010	mg/l	8260B	03/08/11	1
Naphthalene	BDL	0.0050	mg/l	8260B	03/08/11	1
n-Propylbenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
Styrene	BDL	0.0010	mg/l	8260B	03/08/11	1
1,1,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	03/08/11	1
1,1,2,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	03/08/11	1
Tetrachloroethene	BDL	0.0010	mg/l	8260B	03/08/11	1
Toluene	BDL	0.0050	mg/l	8260B	03/08/11	1
1,2,3-Trichlorobenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
1,2,4-Trichlorobenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
1,1,1-Trichloroethane	BDL	0.0010	mg/l	8260B	03/08/11	1
1,1,2-Trichloroethane	BDL	0.0010	mg/l	8260B	03/08/11	1
Trichloroethene	0.0012	0.0010	mg/l	8260B	03/08/11	1
Trichlorofluoromethane	BDL	0.0050	mg/l	8260B	03/08/11	1
1,2,3-Trichloropropane	BDL	0.0025	mg/l	8260B	03/08/11	1
1,2,4-Trimethylbenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
1,3,5-Trimethylbenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
Vinyl chloride	BDL	0.0010	mg/l	8260B	03/08/11	1
Xylenes, Total	BDL	0.0030	mg/l	8260B	03/08/11	1
Surrogate Recovery						
Toluene-d8	102.	% Rec.		8260B	03/08/11	1
Dibromofluoromethane	97.6	% Rec.		8260B	03/08/11	1
a,a,a-Trifluorotoluene	106.	% Rec.		8260B	03/08/11	1
4-Bromofluorobenzene	112.	% Rec.		8260B	03/08/11	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.0016	mg/l	8270C-SIM	03/11/11	32
Acenaphthene	BDL	0.0016	mg/l	8270C-SIM	03/11/11	32
Acenaphthylene	BDL	0.0016	mg/l	8270C-SIM	03/11/11	32
Benzo(a)anthracene	BDL	0.0016	mg/l	8270C-SIM	03/11/11	32
Benzo(a)pyrene	BDL	0.0016	mg/l	8270C-SIM	03/11/11	32
Benzo(b)fluoranthene	BDL	0.0016	mg/l	8270C-SIM	03/11/11	32
Benzo(g,h,i)perylene	BDL	0.0016	mg/l	8270C-SIM	03/11/11	32
Benzo(k)fluoranthene	BDL	0.0016	mg/l	8270C-SIM	03/11/11	32
Chrysene	BDL	0.0016	mg/l	8270C-SIM	03/11/11	32
Dibenz(a,h)anthracene	BDL	0.0016	mg/l	8270C-SIM	03/11/11	32
Fluoranthene	BDL	0.0016	mg/l	8270C-SIM	03/11/11	32
Fluorene	BDL	0.0016	mg/l	8270C-SIM	03/11/11	32
Indeno(1,2,3-cd)pyrene	BDL	0.0016	mg/l	8270C-SIM	03/11/11	32
Naphthalene	BDL	0.0080	mg/l	8270C-SIM	03/11/11	32
Phenanthrene	BDL	0.0016	mg/l	8270C-SIM	03/11/11	32

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)



YOUR LAB OF CHOICE

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

March 11, 2011

Mike Lacher
Geotechnical Consultants, Inc.
720 Greencrest Drive
Westerville, OH 43081

ESC Sample #: L504877-07

Date Received : March 05, 2011
Description : S. Yale Ave.

Site ID :

Sample ID : EB-5

Project # : 11-E-16097A

Collected By : Mike Lacher
Collection Date : 03/03/11 12:15

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Pyrene	BDL	0.0016	mg/l	8270C-SIM	03/11/11	32
1-Methylnaphthalene	BDL	0.0080	mg/l	8270C-SIM	03/11/11	32
2-Methylnaphthalene	BDL	0.0080	mg/l	8270C-SIM	03/11/11	32
2-Chloronaphthalene	BDL	0.0080	mg/l	8270C-SIM	03/11/11	32
Surrogate Recovery						
Nitrobenzene-d5	0.00		% Rec.	8270C-SIM	03/11/11	32
2-Fluorobiphenyl	0.00		% Rec.	8270C-SIM	03/11/11	32
p-Terphenyl-d14	0.00		% Rec.	8270C-SIM	03/11/11	32

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 03/11/11 17:06 Printed: 03/11/11 17:07



LAB SCIENCE'S

YOUR LAB OF CHOICE

17065 Lebanon Rd.
Mt. Juliet, TN 37122
1615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

March 11, 2011

Mike Lacher
Geotechnical Consultants, Inc.
720 Greencrest Drive
Westerville, OH 43081

ESC Sample #: L504877-08

Date Received : March 05, 2011
Description : S. Yale Ave.

Site ID :

Sample ID : EB-6

Project #: 11-E-16097A

Collected By : Mike Lacher
Collection Date : 03/03/11 10:15

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics						
Acetone	BDL	0.050	mg/l	8260B	03/08/11	1
Acrylonitrile	BDL	0.010	mg/l	8260B	03/08/11	1
Benzene	0.0011	0.0010	mg/l	8260B	03/08/11	1
Bromobenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
Bromodichloromethane	BDL	0.0010	mg/l	8260B	03/08/11	1
Bromoform	BDL	0.0010	mg/l	8260B	03/08/11	1
Bromomethane	BDL	0.0050	mg/l	8260B	03/08/11	1
n-Butylbenzene	0.030	0.0010	mg/l	8260B	03/08/11	1
sec-Butylbenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
tert-Butylbenzene	0.0018	0.0010	mg/l	8260B	03/08/11	1
Carbon tetrachloride	BDL	0.0010	mg/l	8260B	03/08/11	1
Chlorobenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
Chlorodibromomethane	BDL	0.0010	mg/l	8260B	03/08/11	1
Chloroethane	BDL	0.0050	mg/l	8260B	03/08/11	1
2-Chloroethyl vinyl ether	BDL	0.050	mg/l	8260B	03/08/11	1
Chloroform	BDL	0.0050	mg/l	8260B	03/08/11	1
Chloromethane	BDL	0.0025	mg/l	8260B	03/08/11	1
2-Chlorotoluene	BDL	0.0010	mg/l	8260B	03/08/11	1
4-Chlorotoluene	BDL	0.0010	mg/l	8260B	03/08/11	1
1,2-Dibromo-3-Chloropropane	BDL	0.0050	mg/l	8260B	03/08/11	1
1,2-Dibromoethane	BDL	0.0010	mg/l	8260B	03/08/11	1
Dibromomethane	BDL	0.0010	mg/l	8260B	03/08/11	1
1,2-Dichlorobenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
1,3-Dichlorobenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
1,4-Dichlorobenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
Dichlorodifluoromethane	BDL	0.0050	mg/l	8260B	03/08/11	1
1,1-Dichloroethane	BDL	0.0010	mg/l	8260B	03/08/11	1
1,2-Dichloroethane	BDL	0.0010	mg/l	8260B	03/08/11	1
1,1-Dichloroethene	BDL	0.0010	mg/l	8260B	03/08/11	1
cis-1,2-Dichloroethene	0.0028	0.0010	mg/l	8260B	03/08/11	1
trans-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	03/08/11	1
1,2-Dichloropropane	BDL	0.0010	mg/l	8260B	03/08/11	1
1,1-Dichloropropene	BDL	0.0010	mg/l	8260B	03/08/11	1
1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	03/08/11	1
cis-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	03/08/11	1
trans-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	03/08/11	1
2,2-Dichloropropane	BDL	0.0010	mg/l	8260B	03/08/11	1
Di-isopropyl ether	BDL	0.0010	mg/l	8260B	03/08/11	1
Ethylbenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
Hexachloro-1,3-butadiene	BDL	0.0010	mg/l	8260B	03/08/11	1
n-Hexane	BDL	0.010	mg/l	8260B	03/08/11	1
Isopropylbenzene	0.011	0.0010	mg/l	8260B	03/08/11	1
p-Isopropyltoluene	BDL	0.0010	mg/l	8260B	03/08/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)



L.A.B. SCIENCES

YOUR LAB OF CHOICE

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5859
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

March 11, 2011

Mike Lacher
Geotechnical Consultants, Inc.
720 Greencrest Drive
Westerville, OH 43081

REPORT OF ANALYSIS

ESC Sample #: L504877-08

Date Received : March 05, 2011
Description : S. Yale Ave.

Site ID :

Sample ID : EB-6

Project #: 11-E-16097A

Collected By : Mike Lacher
Collection Date : 03/03/11 10:15

Parameter	Result	Det. Limit	Units	Methed	Date	Dil.
2-Butanone (MEK)	BDL	0.010	mg/l	8260B	03/08/11	1
Methylene Chloride	BDL	0.0050	mg/l	8260B	03/08/11	1
4-Methyl-2-pentanone (MIBK)	BDL	0.010	mg/l	8260B	03/08/11	1
Methyl tert-butyl ether	BDL	0.0010	mg/l	8260B	03/08/11	1
Naphthalene	BDL	0.0050	mg/l	8260B	03/08/11	1
n-Propylbenzene	0.016	0.0010	mg/l	8260B	03/08/11	1
Styrene	BDL	0.0010	mg/l	8260B	03/08/11	1
1,1,1,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	03/08/11	1
1,1,2,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	03/08/11	1
Tetrachloroethene	BDL	0.0010	mg/l	8260B	03/08/11	1
Toluene	BDL	0.0050	mg/l	8260B	03/08/11	1
1,2,3-Trichlorobenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
1,2,4-Trichlorobenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
1,1,1-Trichloroethane	BDL	0.0010	mg/l	8260B	03/08/11	1
1,1,2-Trichloroethane	BDL	0.0010	mg/l	8260B	03/08/11	1
Trichloroethene	BDL	0.0010	mg/l	8260B	03/08/11	1
Trichlorofluoromethane	BDL	0.0050	mg/l	8260B	03/08/11	1
1,2,3-Trichloropropane	BDL	0.0025	mg/l	8260B	03/08/11	1
1,2,4-Trimethylbenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
1,3,5-Trimethylbenzene	BDL	0.0010	mg/l	8260B	03/08/11	1
Vinyl chloride	BDL	0.0010	mg/l	8260B	03/08/11	1
Xylenes, Total	BDL	0.0030	mg/l	8260B	03/08/11	1
Surrogate Recovery						
Toluene-d8	109.	% Rec.		8260B	03/08/11	1
Dibromofluoromethane	99.6	% Rec.		8260B	03/08/11	1
a,a,a-Trifluorotoluene	99.1	% Rec.		8260B	03/08/11	1
4-Bromofluorobenzene	119.	% Rec.		8260B	03/08/11	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.0016	mg/l	8270C-SIM	03/11/11	32
Acenaphthene	BDL	0.0016	mg/l	8270C-SIM	03/11/11	32
Acenaphthylene	0.0042	0.0016	mg/l	8270C-SIM	03/11/11	32
Benz(a)anthracene	0.0027	0.0016	mg/l	8270C-SIM	03/11/11	32
Benz(a)pyrene	BDL	0.0016	mg/l	8270C-SIM	03/11/11	32
Benz(b)fluoranthene	BDL	0.0016	mg/l	8270C-SIM	03/11/11	32
Benz(g,h,i)perylene	BDL	0.0016	mg/l	8270C-SIM	03/11/11	32
Benz(k)fluoranthene	BDL	0.0016	mg/l	8270C-SIM	03/11/11	32
Chrysene	0.0029	0.0016	mg/l	8270C-SIM	03/11/11	32
Dibenz(a,h)anthracene	BDL	0.0016	mg/l	8270C-SIM	03/11/11	32
Fluoranthene	0.0032	0.0016	mg/l	8270C-SIM	03/11/11	32
Fluorene	0.0036	0.0016	mg/l	8270C-SIM	03/11/11	32
Indeno(1,2,3-cd)pyrene	BDL	0.0016	mg/l	8270C-SIM	03/11/11	32
Naphthalene	0.020	0.0080	mg/l	8270C-SIM	03/11/11	32
Phenanthrene	0.0039	0.0016	mg/l	8270C-SIM	03/11/11	32

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)



YOUR LAB OF CHOICE

12965 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

March 11, 2011

Mike Lacher
Geotechnical Consultants, Inc.
720 Greencrest Drive
Westerville, OH 43081

ESC Sample # : L504877-08

Date Received : March 05, 2011
Description : S. Yale Ave.

Site ID :

Sample ID : EB-6

Project # : 11-E-16097A

Collected By : Mike Lacher
Collection Date : 03/03/11 10:15

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Pyrene	0.0032	0.0016	mg/l	8270C-SIM	03/11/11	32
1-Methylnaphthalene	0.16	0.0080	mg/l	8270C-SIM	03/11/11	32
2-Methylnaphthalene	0.018	0.0080	mg/l	8270C-SIM	03/11/11	32
2-Chloronaphthalene	BDL	0.0000	mg/l	8270C-SIM	03/11/11	32
Surrogate Recovery						
Nitrobenzene-d5	0.00		% Rec.	8270C-SIM	03/11/11	32
2-Fluorobiphenyl	0.00		% Rec.	8270C-SIM	03/11/11	32
p-Terphenyl-d14	0.00		% Rec.	8270C-SIM	03/11/11	32

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 03/11/11 17:06 Printed: 03/11/11 17:07

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L504877-01	WG524675	SAMP	o-Terphenyl	R1601671	J7
	WG525402	SAMP	Nitrobenzene-d5	R1606734	J7
	WG525402	SAMP	2-Fluorobiphenyl	R1606734	J7
	WG525402	SAMP	p-Terphenyl-d14	R1606734	J7
L504877-04	WG525402	SAMP	Nitrobenzene-d5	R1606734	J7
	WG525402	SAMP	2-Fluorobiphenyl	R1606734	J7
	WG525402	SAMP	p-Terphenyl-d14	R1606734	J7
L504877-05	WG524938	SAMP	Toluene-d8	R1603810	J1
	WG525323	SAMP	Nitrobenzene-d5	R1606731	J7
L504877-06	WG525323	SAMP	Anthracene	R1606731	O
	WG525323	SAMP	Acenaphthene	R1606731	O
	WG525323	SAMP	Acenaphthylene	R1606731	O
	WG525323	SAMP	Benz(a)anthracene	R1606731	O
	WG525323	SAMP	Benz(a)pyrene	R1606731	O
	WG525323	SAMP	Benz(b)fluoranthene	R1606731	O
	WG525323	SAMP	Benz(g,h,i)perylene	R1606731	O
	WG525323	SAMP	Benz(k)fluoranthene	R1606731	O
	WG525323	SAMP	Chrysene	R1606731	O
	WG525323	SAMP	Dibenz(a,h)anthracene	R1606731	O
	WG525323	SAMP	Fluoranthene	R1606731	O
	WG525323	SAMP	Fluorene	R1606731	O
	WG525323	SAMP	Indeno(1,2,3-cd)pyrene	R1606731	O
	WG525323	SAMP	Naphthalene	R1606731	O
	WG525323	SAMP	Phenanthrene	R1606731	O
	WG525323	SAMP	Pyrene	R1606731	O
	WG525323	SAMP	1-Methylnaphthalene	R1606731	O
	WG525323	SAMP	2-Methylnaphthalene	R1606731	O
	WG525323	SAMP	2-Chloronaphthalene	R1606731	O
L504877-07	WG525323	SAMP	Anthracene	R1606731	O
	WG525323	SAMP	Acenaphthene	R1606731	O
	WG525323	SAMP	Acenaphthylene	R1606731	O
	WG525323	SAMP	Benz(a)anthracene	R1606731	O
	WG525323	SAMP	Benz(a)pyrene	R1606731	O
	WG525323	SAMP	Benz(b)fluoranthene	R1606731	O
	WG525323	SAMP	Benz(g,h,i)perylene	R1606731	O
	WG525323	SAMP	Benz(k)fluoranthene	R1606731	O
	WG525323	SAMP	Chrysene	R1606731	O
	WG525323	SAMP	Dibenz(a,h)anthracene	R1606731	O
	WG525323	SAMP	Fluoranthene	R1606731	O
	WG525323	SAMP	Fluorene	R1606731	O
	WG525323	SAMP	Indeno(1,2,3-cd)pyrene	R1606731	O
	WG525323	SAMP	Naphthalene	R1606731	O
	WG525323	SAMP	Phenanthrene	R1606731	O
	WG525323	SAMP	Pyrene	R1606731	O
	WG525323	SAMP	1-Methylnaphthalene	R1606731	O
	WG525323	SAMP	2-Methylnaphthalene	R1606731	O
	WG525323	SAMP	2-Chloronaphthalene	R1606731	J7
	WG525323	SAMP	Nitrobenzene-d5	R1606731	J7
	WG525323	SAMP	2-Fluorobiphenyl	R1606731	J7
	WG525323	SAMP	p-Terphenyl-d14	R1606731	J7
L504877-08	WG524911	SAMP	tert-Butylbenzene	R1603429	V3
	WG524911	SAMP	Isopropylbenzene	R1603429	V3
	WG524911	SAMP	n-Propylbenzene	R1603429	V3
	WG525323	SAMP	Nitrobenzene-d5	R1606731	J7
	WG525323	SAMP	2-Fluorobiphenyl	R1606731	J7
	WG525323	SAMP	p-Terphenyl-d14	R1606731	J7

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits
J7	Surrogate recovery limits cannot be evaluated; surrogates were diluted out
O	(ESC) Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary dilution.
V3	(ESC) ~ Additional QC Info: The internal standard exhibited poor recovery due to sample matrix interference. The analytical results will be biased high. BDL results will be unaffected.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision ~ The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
03/11/11 at 17:07:22

TSR Signing Reports: 364
RX - Priority Rush

All BTEX analyses are to be run via 8260 TAH All BTEX analyses are to be run via 8260 TAH Log
and comment QC2VAP for all samples.

Sample: L504877-01 Account: GCICOLOR Received: 03/05/11 14:30 Due Date: 03/11/11 00:00 RPT Date: 03/11/11 17:06
QC2VAP
Sample: L504877-02 Account: GCICOLOR Received: 03/05/11 14:30 Due Date: 03/11/11 00:00 RPT Date: 03/11/11 17:06
QC2VAP
Sample: L504877-03 Account: GCICOLOR Received: 03/05/11 14:30 Due Date: 03/11/11 00:00 RPT Date: 03/11/11 17:06
QC2VAP
Sample: L504877-04 Account: GCICOLOR Received: 03/05/11 14:30 Due Date: 03/11/11 00:00 RPT Date: 03/11/11 17:06
QC2VAP
Sample: L504877-05 Account: GCICOLOR Received: 03/05/11 14:30 Due Date: 03/11/11 00:00 RPT Date: 03/11/11 17:06
QC2VAP
Sample: L504877-06 Account: GCICOLOR Received: 03/05/11 14:30 Due Date: 03/11/11 00:00 RPT Date: 03/11/11 17:06
QC2VAP
Sample: L504877-07 Account: GCICOLOR Received: 03/05/11 14:30 Due Date: 03/11/11 00:00 RPT Date: 03/11/11 17:06
QC2VAP
Sample: L504877-08 Account: GCICOLOR Received: 03/05/11 14:30 Due Date: 03/11/11 00:00 RPT Date: 03/11/11 17:06
QC2VAP

Company Name/Address:

Geotechnical Consultants, Inc.

720 Greencrest Drive
Westerville, OH 43081

Alternate billing information:

Claim of Copyright
Page _____ of _____

G026 ENVIRONMENTAL

G026

Report to:	<u>Mike Lacher</u>	Email to:	<u>mlacher@uci.edu</u>
Project:	<u>S. Yale Ave.</u>	City/State Collected:	<u>Columbus, OH</u>
Description:		Client Project #:	<u>1265</u>
Phone:	<u>(614) 839-4271</u>	ESC Key:	<u>11-20-01</u>

Collected by: Lach
Collected by (signature): 
Immediately
Packed on ice N Y A

Site/Facility ID#:	P.O. #:	
<input checked="" type="checkbox"/> Rush?	(Lab MUST Be Notified)	
	Date Results Needed:	
	Same Day..... Next Day..... Two Day.....	200% 100% 50%
	Email? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	of or either
	FAX? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Comments:		
CoCode GCICLOOH (lab use only)		
Template/Preset		
Shipped Via:		

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	Comments	Remarks/Contaminant		Sample # (lab only)
							Three Day	25%	
EB-1 D-4	SS	O'-4'	3/3/11	1320	4	X X X X			LSO1877-01
EB-2 G-8	"	6'-8'	"	1515	4	X X X X			02
EB-5 G-8	"	6'-8'	"	1200	4	X X X X			03
EB-4 O-2	"	O'-2'	"	1000	4	X X X X			04
EB-1	GW		3/3/11	1330	6	X X X			Filter GW samples for metals analysis
EB-2	"		"	1530	5	X X			06
EB-5	"		"	1215	6	X X X			07
EB-4	"		"	1015	6	X X X			08

*Matrix: SS - Soil/Solid GW - Groundwater WW - Waste/Water

Remarks:

Matrix: SS - Sciv/Solid	GW - Groundwater	WW - WasteWater	DW - Drinking Water	OT - Other	8795	8796	8797	8798	8799	pH	Temp
					1784	1785	1786	1787	1788	Flow	Other
Remarks:											
Relinquished by: (Signature)	Date: 3/4/11	Time: 0900	Received by: (Signature)		Samples returned via: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier		Bottles Received: 394		Condition: ok	(lab use only)	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)		Temp: 24.4		394		CoC Seal intact	Y	N
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)		Date: 3-5-11		Time: 1430		pH Checked:	NCF	
Relinquished by: (Signature)											